Inaugural Address
ON
PATHOLOGY, PAST AND PRESENT.

Delivered at the University of Edinburgh,

BY W. S. GREENFIELD, M.D., F.R.C.P.,
OFESSOR OF GENERAL PATHOLOGY IN THE UNIVERSITY OF EDINBURGH.

GENTLEMEN,—Coming before you to-day for the first time as the formal occupant of the Chair of Pathology in this University, it is fitting that I should, in accordance with precedent, address to you some statement of the past history of the chair, and of the present relations of my subject to the study of medicine.

Just fifty years ago the first separate course of general pathology in this University was commenced. Previously, indeed, it had formed a part of the course of the Institutes of Medicine, in its three branches of physiology, pathology, and therapeutics, just as there was but one chair of anatomy and surgery. The growing importance and extended knowledge of physiology would soon have rendered such a separation inevitable, had not the prerogative of the Crown somewhat rudely and forcibly intervened, and without consultation with any of the medical faculty, or, indeed, with anyone, appointed Dr. John Thomson professor of general pathology, and made attendance upon his lectures imperative upon all candidates for graduation.[1] No wonder that the medical faculty viewed such a course with disfavour, and that such eminent pathologists as Alison, Syme, and Christison were strongly opposed to the foundation of the chair in such a manner. It is not worth while to follow the course of the disputes and difficulties which ensued, or to revive long-buried controversies. The founders of the chair have at least the credit of foresight in seeing what must in a few years have come to pass, and profiting by it; and Professor Thomson was, as his "Lectures on Inflammation"[2] show, no mean pathologist in his earlier days. During his tenure of the professorship pathology did not suffer in the school, but it was by the labours of his colleagues rather than his own that it was enriched. On his death in 1841 he was succeeded by Dr. Henderson, who retained the chair till 1869. I know not what influence may have been exerted by it during his long tenure of office, but it cannot have been marked in the hands of one who, whatever his genius and accomplishments, was in the strange position of professing a subject whose methods are practical and whose principles are the basis of scientific medicine, whilst he practised a system of therapeutics[3] originating in groundless theories, and uncontrolled by scientific observation. Thus for thirty-eight years after its foundation, the chair, instead of advancing on the lines of observation and research which should have made it a distinguished aid to science, remained practically useless for that purpose.

It would ill become me to attempt any worthy record of my distinguished predecessor, Dr. Sanders. What he was as a man, as a physician, and as a pathologist, you already know full well. His character and life-work are fresh in the memories of all; and we this day mourn his loss. This only will I say with regard to what he did for this chair: recognising the great importance of pathology as a branch of practical medical education, convinced that to be of real value it must be grounded on observation rather than theory, and that morbid anatomy in its fullest development must be one of its main supports, he set himself to build up, step by step, a full and thorough teaching of pathology in all its branches. And he thus accomplished, not merely a complete course of sytematic teaching, but he so organised and arranged the means and appliances for practical study as to be prepared for any future developments of the science. What he has done in this respect will yet, I trust, bear fruit for many future years, though he did not live to see and enjoy its full fruition. Let us remember that it is to him we owe the establishment of laboratories for the practical study and teaching of pathological anatomy, histology, and chemistry, and that whatever future researches may be carried out in the new laboratories will be in a measure due to his influence.

But it is time that I should define to you the scope of the subject taught from this chair.

Pathology has been defined as the science of disease, as distinguished from Physiology, the science of health, bearing a similar relation to the morbid structure and functions of the body which physiology does to its healthy conditions. The name "General Pathology," as given to this chair, was, I believe, intended to distinguish the subject from that special pathology which is to be learnt in the study of surgery and medicine, and to include all those general facts and laws relating to disease which can be advantageously studied apart from the special diseases of which they form an element.

So long as disease was regarded as a sort of morbid entity, as the working of a spirit or evil humour which entered into the body and settled down upon and deranged the action of various organs, so long only could pathology be studied apart from morbid anatomy. We have gradually come to see that the derangement of function which we call disease is inseparably connected with an altered physical or chemical condition, which in many cases becomes obvious as a structural change, and that if we would understand the nature and course of disease, we must investigate the conditions of structure which underlie the outward phenomena.

It is in this way that morbid anatomy, in its widest sense, has come to be inseparably linked with general pathology.

Pathology, then, includes in its scope—

Morbid or Pathological Anatomy—i. e., the study of all the altered conditions of diseased organs, in their characters physical and chemical, and their relations to one another, whether revealed by the naked eye, the microscope, or in other ways. It investigates, too, the conditions of their occurrence, and seeks to elucidate the mode in which the visible changes have been brought about. Grouping together those changes which are alike in the several organs or tissues, and eliminating those which are peculiar to the individual organs, it establishes certain groups or orders of morbid changes which form the subject of General Morbid Anatomy.

But it goes yet further, and by investigating the mode in which the altered constitution of the organ affects its function, and gives rise to symptoms, it forms a great part of the basis of the subjects of Pathogenesis and Pathological Physiology.

But pathology, as including the science of disease, is not content with registering its effects; it traces them back to their origin, and, under General Etiology, it endeavours to study the general causes of disease, whether external to the body or within it, and to investigate their mode of action.

And, lastly, finding that there are processes of deranged action, morbid modes of motion, so to speak, which, grouped in various ways, enter into a multitude of diverse diseases, but which have fixed laws which govern their course, we group these together for study under the heading of what is more strictly defined as General Pathology.

I have emphasised this connexion between general pathology and morbid anatomy, or, to put it in a wider form, between disease and its physical basis, because in the history of medicine we find that in proportion as this connexion has been recognised so has been the advance in its exact knowledge. Yet we must ever bear in mind that the study of the forms and reactions of dead matter can only guide us to a certain point, that it is living matter with which we have to do, and that it is by the exact study of the phenomena of life that we must bridge over the chasm between dead morbid anatomy and living pathology. If we start with the study of phenomena without the guide afforded by the knowledge of their physical conditions, we shall never reach solid ground, but wander in the quagmires of speculation, whilst if we omit to recognise the properties of life we shall equally fail. It is thus that physiology, biology, and experimental pathology, together with clinical medicine, are the inseparable adjuncts of morbid anatomy in working out scientific pathology. It is thus that the study of living matter in all its forms, and of the influences which act upon it, are of vital importance to the pathologist.

I would now ask you to look back at the history of morbid

[1] The Chair of General Pathology in the University of Paris was founded by Louis Philippe after the Revolution in 1830 in a somewhat similar way, and Broussais appointed first professor.
[2] Published in 1813.
[3] Dr. Henderson became a homœopathist.

anatomy, in order to realise how it has grown and acquired its present position as the groundwork of pathology. For until morbid anatomy had successfully asserted this position, pathology had no scientific existence, and the theories and doctrines evolved by a combined observation of symptoms and a use of the imagination have passed into the region of historical curiosities.

Morbid anatomy was studied at a very early period of the history of medicine. Hippocrates (460 B.C.) is usually spoken of as the earliest to pay attention to it, but there can be little doubt that in India, long before Hippocrates, there was some knowledge and use of it. Erasistratus and Hierophilus are said by Pliny to have studied it. Aretæus[4] seems to have far excelled his predecessors in his acquaintance with it. But Celsus, who probably lived in the time of Tiberius, and whose work "De Re Medica" is still in use as a subject of examination by some medical bodies, appears to have attached no importance to it as a part of the study of disease. Galen,[5] in the second century, studied morbid anatomy both practically and historically, and recognised more fully than his predecessors how often structural change was associated with functional derangement.

But just as the Mohammedan conquest of India was to destroy Indian medicine, so did the overthrow of the Roman Empire arrest all progress in science in Europe; and medical science during the Middle Ages became obscured, and lost, instead of gaining, knowledge. The history of morbid anatomy is practically a blank until the seventeenth century, although, here and there, isolated observations were recorded by anatomists and surgeons. With the revival of science came the revival of medicine.

Nearly 1500 years elapsed before the next work of value on morbid anatomy, when the "Sepulchretum"[6] of Bonetus appeared, a work in which some systematic attempt was made to connect the appearances in the dead body with disease in the living.

Eighty years later the first great systematic work on morbid anatomy, that of Morgagni,[7] was published. Morgagni was a pupil of the illustrious Valsalva at Bologna, and was professor of anatomy at Padua from 1715 to 1771. In his work he brings together an enormous amount of accurate observation upon morbid anatomy, both from his own personal work and from other sources, and attempts to show how the changes found were related to the production of symptoms.

Morgagni, therefore, took the first step towards the establishment of a scientific pathology by attempting to localise disease. But it needed the discoveries of structure and function to complete the connexion between morbid anatomy and pathology.

The next work of importance[8] was that of Matthew Baillie,[9] who in 1799 began to publish the first illustrated work on morbid anatomy. But it was to John Hunter that Baillie was indebted both for inspiration and for the material from which most of his drawings were made, and it is, I believe, to the influence of John Hunter, renowned alike as anatomist, physiologist, and pathologist, that we may in a great measure trace the revival of pathology which followed.

With the beginning of the present century began the real and thorough study of morbid anatomy. It seems strange that so simple and obvious a method of studying disease should have been little practised for so many hundred years, and that within the life-time of some here to-day it has grown to its present vast proportions.

We owe to great anatomists, who in most cases were also surgeons, the commencement of this movement of revival. They had most to do with the dissection of dead bodies, and the deeper and more attentive study of anatomy was a guide to altered as well as to healthy structure. The systematic application of these studies to medicine was yet to come, and it was in France that the first great movements took place.[10] The names of Bichat, Laennec, Andral, and Cruveilhier are pre-eminent amongst the many active workers. Of Bichat I shall have to speak later. Laennec,[11] during his earlier years, devoted himself ardently to pathological research, but his labours, after his discovery of mediate auscultation, were mainly directed to that subject, although his influence greatly assisted in the work.

In the earlier years of this century the French medical world was under the domination of the ideas of Broussais, who, in 1816,[12] promulgated his doctrine of so-called "physiological medicine," in which the stomach became the centre and source of all diseases, and varying degrees of inflammation of the stomach and intestines the starting-point of all pathological changes. Against such theories the school of pathological anatomy of Bayle and Laennec, Cruveilhier and Andral, asserted itself, and gradually made good the cause of the "medicine of observation," grounded on clinical study joined to morbid anatomy.

Cruveilhier, the great anatomist, supported the cause by his extensive observations,[13] subsequently embodied in his great work on morbid anatomy.

But to Andral[14] must be given the credit of fighting, step by step, the detail of the battle against the almost overwhelming opposition of Broussais and his followers, who included a great part of the medical world. In 1823 he published the first volume of his "Clinique Médicale," in which were arrayed in opposition to Broussais a great series of clinical and post-mortem observations, which demonstrated the falsity of the speculations of Broussais. It was the first great move in the conflict of scientific pathology founded on observation against mere speculation, which ended in the complete overthrow of Broussais' system, so that when Andral succeeded Broussais in the chair of General Pathology in 1839, Broussais' system had already become extinct. That Andral was a diligent morbid anatomist, as well as a brilliant physician and pathologist, is shown by a fact which he casually mentions, that he had examined the thoracic duct and principal lymphatic vessels in more than 600 subjects.[15] It was Andral's especial merit that he was not content merely to record morbid appearances, but in every case sought to trace their causes,[16] and to discover how

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[4] Aretæus of Cappadocia, who lived in the time of Vespasian, goes even so far as to mention the production of hemiplegia of one side in disease of the opposite cerebral hemisphere, and of paralysis of the same side in disease of the spinal cord. He described, too, intestinal ulcers, and speaks of jaundice as caused by obstruction of the bile-ducts by scirrhus, or by inflammation.

[5] Galen (130-200 A.D.) left on record a large amount of pathological lore, but how much originated with himself is doubtful. It is to him that we owe the introduction of pathological experiments upon living animals.

[6] Bonetti Sepulchretum, published 1679. There is an attempt to trace diseases to their anatomical seats, but much that is fabulous, and too little personal observation.

[7] J. B. Morgagni, born in 1682, studied under Valsalva at Bologna, became Professor of Anatomy in Padua University in 1715, and held that post till his death in 1771. He was a great friend of Santorini. His great work, De Causis et Sedibus Morborum per Anatomen Indagatis, was arranged mainly on the basis of symptoms and orders of symptoms, cases being taken in which like symptoms were observed, and the symptoms discussed in the light of post-mortem examination. This method was the only one possible in his day, when the seats of various functions had been but very imperfectly determined; and it was in accordance with the semeiological system of medicine of his day. It was a first step to the localisation of disease to localise the cause of the most prominent symptoms. The aphorisms of Hippocrates had still a remarkably strong hold even upon so independent an observer as Morgagni, and he hardly ventured to question them in the face of the strongest evidence.

[8] Those of Lieutaud in 1767, and Ludwig in 1785, may also be mentioned.

[9] On the Morbid Anatomy of some of the most important parts of the Human Body, illustrated by engravings, London, 1799. Nearly half of the drawings are from "specimens in Mr. Hunter's collection," and many others "from Mr. Heaviside's collection," which was given thirty years later to the Hunterian Museum. We must remember that John Hunter's museum was practically the first museum containing specimens of pathological anatomy. Other museums were founded at Amsterdam in 1789, at Leyden in 1795, Berlin in 1796; and later, those of Vienna, Florence, and Paris did much to aid in fixing observations.

[10] Text-books of Pathological Anatomy began to appear towards the early part of the century,—that of Conradi in 1790, Voigtel in 1804, Meckel in 1811, Otto in 1814, all of German origin.

[11] Laennec was born in 1781, came to Paris in 1800, and studied under Corvisart and Bichat. His work on pathological anatomy was mainly done between 1804 and 1812. For three years he lectured on morbid anatomy as successor to Bichat. In 1815 he discovered mediate auscultation, and his subsequent labours, till his death from phthisis in 1826, were almost entirely on this subject.

[12] Examen de la Doctrine Médicale généralement adoptée.

[13] Cruveilhier published his first paper on Pathological Anatomy in 1816 (Essai sur l'Anatomie Pathologique). In 1825 he was appointed Professor of Anatomy in the University of Paris, and in 1829 commenced the publication of his great illustrated work on Pathological Anatomy (Anatomie Pathologique du Corps Humain, vol. i.). In 1835 he was transferred to the chair of Pathological Anatomy.

[14] Andral lectured on pathological anatomy in Paris before 1825, in the Extra-mural School (*Enseignement libre*). In 1823 he was appointed Professor of Hygiene in the University of Paris, and in 1830 transferred to the chair of Internal Pathology. His Précis d'Anatomie Pathologique, the complement of his Clinique Médicale, was published in 1829. He died in 1876, at the age of seventy-nine. He was the pupil of Laennec and Lerminier. To the latter he owed his opportunities for acquiring material for his Clinique Médicale.

[15] Précis d'Anatomie Pathologique.

[16] How far Andral was in advance even of some of the distinguished pathologists of his day may be judged from these words of Bayle—"The end of morbid anatomy is to bring new light to nosology; its utility is limited to supplying a new means of comparing those organic diseases

they were related to each other, their order of causation and succession, and the part they played in the production of disease. From his time morbid anatomy has become not merely an observing and recording, but an interpreting science.

Nor must I omit the names of Louis, Bouillaud, Gendrin, Reynaud, and Chomel, who in more special ways advanced pathological anatomy and clinical medicine together.

In England, during the same period, partly from the same causes, and partly through the direct influence of the French school, great attention was being paid to morbid anatomy, especially in relation to diseases of particular organs, and the results were becoming apparent about the time when this chair was founded.

In London three men, all of whom were students and graduates of this University—Hope, Carswell, and Bright,—were especially pre-eminent in this direction.

Hope, who had studied under Laennec and Andral, was, I believe, one of the first to introduce and teach the method of auscultation in this country. To him we owe the first correct explanation of the mode of production and localisation of cardiac murmurs,[17] and his first work in this direction was done when he was resident physician and surgeon in the Royal Infirmary of Edinburgh in 1824 and 1825. In 1833 he published a valuable Atlas of Morbid Anatomy.[18] But his work was eclipsed by that of Robert Carswell, which appeared in 1838. Carswell's immense industry and artistic ability enabled him to produce a very large number of admirable drawings in addition to those published in his work on pathological anatomy, many of which, purchased and presented to this University by his friend Professor Thomson, we have still in daily use for purposes of illustration.[19]

But of the three men who at the time of the foundation of this chair were conferring the greatest services on morbid anatomy and medicine, Richard Bright must take by far the highest rank. He was then lecturer on the Practice of Medicine at Guy's Hospital, and had just completed the publication of those "Reports of Medical Cases" (1827 to 1831), by which his name will be handed down to all succeeding generations; for they contain in the foremost place those observations on kidney disease with which his name is indissolubly connected, and they show that the same method by which he arrived at his great discovery—acute and careful clinical observation, combined with exactly recorded and delineated post-mortem examination, and the whole informed by careful inductive reasoning—was applied to every part of his work. In the same work is contained an accurate description of a series of cases of enteric fever, and drawings and descriptions of the condition of the intestines, which have not, I think, been since surpassed; indeed, he may be said to have worked out the clinical history and pathology of the disease as far as was then possible.

which are of the same nature, and distinguishing those which, in spite of similarity of symptoms, are of entirely different nature, and belong to another order of disease." And he adds—"One would have a very false idea of pathological anatomy if one imagined that it could throw any light upon the essence of organic diseases, on their immediate cause, or on the mechanism of their production. Pathological anatomy only gives us the knowledge of organic lesions."

[17] The fully detailed evidence, confirmed by numerous experiments on animals, was published in his work on Diseases of the Heart in 1832, when he was physician to St. George's Hospital.

[18] Hope grouped together the diseases of each organ in his illustrations, but in the text followed Andral's classification of the various morbid changes into lesions of (1) circulation, (2) nutrition, (3) secretion, (4) the blood, and (5) innervation. Hope's great ability and faithfulness as an artist, and his mastery of clinical medicine, as shown in his work on Diseases of the Heart, make his Atlas of especial value. I ought also to mention in this connexion Robert Hooper, who for nearly thirty years was engaged in collecting materials for an atlas of morbid anatomy, to illustrate the diseases of all the principal internal organs. Only two parts of his work—those on the Brain in 1828, and on the Uterus in 1832—ever saw the light; but I have had the good fortune to obtain possession of more than two hundred water-colour drawings made for this purpose, dating from 1797 to 1834, many of which were made by such men as Howship, Hope, and others equally capable.

[19] Carswell's published work cannot be said to have done justice to his powers, and the arrangement which he adopted for illustrating the various processes of inflammation, analogous tissues, atrophy, hypertrophy, and so on, by examples of each in various organs, though valuable at the time, has produced much confusion, for he was often in error as to the nature of the process.

(To be continued.)

DR. COLLIER, medical superintendent of the temporary Small-pox Hospital, Fulham, has been voted a sum of £125 for extra services in connexion with the small-pox epidemic.

ABSTRACT OF THREE

Clinical Lectures,

WITH MICROSCOPICAL DEMONSTRATIONS,

ON

TRUE LICHEN AND ITS VARIOUS FORMS.

Delivered at University College Hospital,

BY H. RADCLIFFE CROCKER, M.D., M.R.C.P.,

PHYSICIAN TO THE SKIN DEPARTMENT OF THE HOSPITAL.

LECTURE III.

LICHEN PILARIS.

THE condition to which this term is usually applied was more appropriately called pityriasis pilaris by Devergie, for it is simply an accumulation of epidermal cells at the orifice of the hair-sac. Instead of the normal detachment of the cells of the internal root-sheath from the shaft as the hair emerges above the surface, they remain attached to the shaft in concentric layers, forming an inverted cone at the mouth of the hair-sac, either surrounding the shaft or plugging the follicle, so that the hair within becomes a compressed spiral, as it grows up from below. This is especially common in young people at puberty (when hair growth becomes more active), in people who seldom wash, and in xeroderma cases; it is also said to occur in pityriasis rubra, but this is, I think, truly inflammatory, and should be placed in the next category. It is not to pityriasis pilaris that I wish to specially draw your attention to-day, but to point out that there is a true lichen pilaris due to inflammation round the follicle forming papules, which do not alter throughout their whole course, coming, therefore, within Hebra's definition, which I have adopted. With the exception of Dr. Tilbury Fox, most authors do not mention this affection. It may be primary or secondary to some irritation or other inflammation of the skin. It appears as solid acuminate papules slightly reddened and pierced by a small hair, in size from one-sixteenth to one-eighth of an inch; these papules are aggregated into irregular patches, usually few in number, and mostly on the extensor surfaces; when it is secondary to irritation, as in chronic scabies, the grouping is not so observable, and the papules are chiefly on the trunk. I show you some sections of skin from a well-marked case where the lichen was a sequel to psoriasis, and may be viewed as part of that disease. The patient was a warehouseman, aged twenty-seven, and was recovering from a second attack of psoriasis of moderate extent, in which alkaline baths had been freely used, when he drew my attention to some papules on the back of the hand which had been present some few weeks. There was a group of papules about an inch in diameter on the back of the hand, and a corresponding one on the right hand, but less extensive. On the upper third of each thigh were similar patches about two inches in diameter. It was from one of these that the skin was removed. The sections under the microscope show the conical-dilated mouth of the follicle with the hair-shaft in the middle, surrounded by concentric layers of corneous cells plugging the orifice; some of the cells were attached to the shaft, others were continuous with the corneous layer, which was thickened in the neighbourhood of the papule; at the angle where the rete joins the follicle the cells of the rete were elongated perpendicularly, as were also the upper cells of the follicle, and immediately beneath the epithelium a cell effusion is present, which, with the outpoured fluid from the vessels, have pushed up the epidermis round the hair-sac into a papule. These leucocytes can be traced to the bottom of the follicle, but in diminished number, the bulk being above the line bounding the base of the papule. There was some separation of the fibrous layers round the hair-follicle by leucocytes. The treatment was wet lint, covered with oil silk upon the patches, which got well in a few weeks.

LICHEN CIRCINATUS OR CIRCUMSCRIPTUS.

There are considerable differences among authors as to the disease or diseases comprehended under these terms. Thus Dr. Tilbury Fox describes it as a variety of lichen simplex, which consists of roundish or oval patches or rings on the back of the forearm and hand, the calf, hip, or inside of the

thigh. These papules may go on to vesiculation, and discharge a clear fluid, constituting what used to be called lichen agrius. These conditions are now almost universally regarded as papular varieties of eczema. The disease of which I show you an example is one which is recognised and described under the above title by Mr. Erasmus Wilson and Drs. Hilton Fagge and Liveing. The last author gives a very accurate and graphic clinical account of the condition, but I shall venture to differ from him as to its pathology and the consequent treatment. Its position is a strong diagnostic feature; it is almost entirely limited to a triangular space upon the back, of which the base is at the shoulders and interscapular region, and the apex may reach to the lumbar region. In front the eruption occupies more or less of the chest, spreading from the median line. In slight cases the middle line in front and behind, and its immediate neighbourhood, are the parts seized upon. The eruption consists of rings and small groups of papules, which tend to spread at the circumference into rings, the papules forming a bright-red, well-defined margin, while the skin in the centre is either yellow or, more commonly, of a reddish-fawn colour. The rings may be perfect, and of considerable size, or they may meet others, and are then broken into gyrate lines, interspersed with isolated papules or small growths of two or three together; besides these rings, yellowish patches without papules at the margins may be seen. In these doubtless the papules have subsided, leaving only the stains behind. When the fawn-coloured discolorations are well developed, most people would be struck by its resemblance to tinea versicolor, but when the rings are small all resemblance to this disease except the situation is lost; many competent observers also have searched in vain for the elements of a

Fungus elements from a case of so-called Lichen circinatus. Magnified 550 diameters.

fungus. Yet I am convinced that it is a fungous disease, and my object to-day is to adduce both clinical and microscopic evidence that will convince you also.

Under the microscope you will see both spores and mycelium, which are upon the epithelial scales and also isolated; in size and appearance they correspond with the fungus of tinea versicolor. How is it that this fungus has escaped observation, as its nature is obvious enough? First, because the fungus is by no means so abundant as in the ordinary forms of tinea versicolor, and requires careful search, after teasing out of the epithelium and soaking in chloroform and ether to remove fatty particles, which I prefer to solution of potash, and, secondly, that the papular border furnishes the fungus, and not the discoloured part where débris, but not often perfect spores, can be found. But is the treatment founded on this pathology successful? I answer emphatically Yes. The disease, if left to itself, will last for months or even years, and yet local treatment alone with vegetable parasiticides will remove the affection in two or three weeks, watchfulness is, however, necessary for some time, for, like the common form of this disease, it is liable to recur, doubtless because some of the spores have escaped destruction. The parasiticides I have used are sulphurous acid or hyposulphite of soda, one drachm to the ounce, brushed into the part; thymol, half a drachm to one ounce of vaseline, glycerine of borax, and the acid nitrate of mercury ointment diluted. Arsenic, which is recommended by some for internal administration, is never necessary. The late Dr. Tilbury Fox, in his classical work, alludes to papular and other aberrant forms of tinea versicolor, but does not describe this condition in detail, though he was evidently aware of it, but he alludes to even eczema being excited by this fungus. In my opinion, therefore, we must expunge lichen circinatus as a separate affection from our list of skin diseases.

CASE OF

SUPPURATION OF THE KNEE-JOINT, ASSOCIATED WITH PHTHISIS.

AMPUTATION; RECOVERY, WITH DISAPPEARANCE OF CHEST SYMPTOMS.[1]

BY THOMAS BRYANT, F.R.C.S. ENG.,
SURGEON TO GUY'S HOSPITAL.

CHARLES W——, aged twenty-three, a footman, was admitted on May 12th, 1881, into Job ward under Mr. Bryant's care. In February, 1878, he jumped from a loft about ten feet, and at the time felt no ill effects. About ten days afterwards he became feverish and very weak; he perspired a good deal, and had a bad cough. For three months he kept his bed. In August he went into the Canterbury Hospital, where he was told he had rheumatism in his knee. His legs were dressed with spirit lotion, and in a fortnight he was discharged. For three months he was in good health; the swelling had entirely disappeared from his knee, which he was able to bend. His knee, however, soon began to swell again, and became hot and painful. In July, 1879, he was admitted into Guy's, when his knee was swollen and felt pulpy to the hand. It measured 14·25" against right 12·75". There was no fluctuation, but pain on pressure over the femoral condyles. There was then dulness at the base of the left lung. The knee was blistered and a posterior splint was applied. He was discharged Aug. 27th, wearing a Bavarian splint to ensure immobility of the joint, and with an elastic bandage beneath it for purposes of pressure. He wore his splint for two months, when his knee being much better he discontinued it. He was then able to bear his weight on his leg and bend the knee, and so resumed work.

Six weeks ago he jarred his knee when coming downstairs. The accident caused him much pain, and the joint in about two hours after swelled a good deal. He could, however, use the limb. The joint has since steadily grown worse. He has had hæmoptysis for the last three years, and a bad cough in winter. He perspires much at night.

On admission, May 12th, 1881, the knee was much swollen and displaced backwards, the tissues around being very œdematous. The joint was clearly disorganised. The man looked very ill and thin, and had a bad cough. There was dulness over both apices in front, and "cogged" inspiration at both apices, but it was most marked on the left side. There was prolonged expiration and bronchial breathing at the left apex. Good resonance and vesicular murmur at the bases. He had had a good deal of hæmoptysis, and his expectorations were muco-purulent.

June 7th.—Under chloroform his leg was amputated; an Esmarch bandage having been applied as a tourniquet after elevating the limb, antero-posterior flaps were made. The anterior one was made by a semilunar incision reaching to about two inches below the condyles. The posterior flap was made by transfixion. The bone was sawn through above the condyles. All the vessels were twisted, except one large vein, which was ligatured with carbolised gut. Great care was taken to stop all oozing, by the use of sponges wrung out with hot iodine water, that quick union might ensue. The flaps were brought together by silk sutures, one inch apart, strapping being applied in the intervals. The stump was washed with iodine water, and a drainage-tube put in. The wound was dressed with terebene and oil, and the stump put upon a posterior splint. The knee, on examination, was in an advanced state of pulpy disease. The joint was full of caseating pulpy material. The cartilage was removed from the external condyles, and the bone was covered with granulations. The opposing surface of the tibia was in a less advanced condition. The underlying bone was healthy. In places sinuses had begun to form. On the 13th, the sixth day after the operation, the stump was dressed for the first time, when union of nearly the whole length of the wound was found to have taken place. On the 14th the patient was doing well. There was very little discharge from the stump. Temperature 99·6°; pulse 100. On the 17th secretion had diminished in quantity. On the 21st, the fourteenth day after the operation, the drainage-tube was removed. Temperature 101·2°, probably due to constipation. On the 23rd there was only a granulating surface of about a quarter of an

[1] Read before the Medical Society of London, Oct. 24th, 1881.

inch at the inner extremity of the wound. Union had taken place in the rest of its extent. Temperature 99°.—Chest examined: Right apex much improved since his admission. Good resonance over the right apex, and fair over the left, the only fault being a slight prolongation of the respiratory murmur. Left side inspiration still cogged. Respiration still somewhat bronchial. At bases good vesicular murmur.

On July 14th the patient was discharged convalescent, and looking comparatively well. He had then no night-sweats, and did not spit blood. The stump had healed well, except at the inner extremity of the line of union of the flaps, where there was a very small granulating surface.

Remarks.—I have thought this case worthy of being brought before the notice of this Society on account of the important practical point it illustrates—namely, the value of removing local suppurative disease, and more particularly bone or joint disease, when associated with lung mischief; and if it cannot be said in the case before us, from the want of lapse of time to enable us to form a positive judgment, that the organic disease which existed in the lung at the time of the amputation had disappeared, there can be no doubt that it had become quiescent, and had apparently advanced towards cure; for when the man left the hospital all the local lung symptoms had ameliorated, and his general condition had greatly improved. It is to be noticed also that the wound after the amputation had almost entirely healed by quick or primary union. If I might venture to speak from my own personal observation, I am convinced that the presence of local suppurative joint and bone disease, if it does not primarily originate lung trouble, does much to aggravate it and hasten its progress; while the case I have brought before you, in addition to the experience gained by others which have passed under my care, clearly prove that by the removal of the local suppurative disease the lung mischief, which may have been previously progressive, is retarded, if not cured; the lung disease by its presence affording an argument in favour of operative action rather than of delay. Under these circumstances, it clearly becomes the duty of the surgeon to employ his art actively rather than expectantly, and to take away by no partial but by some decided operative measure any local suppurative disease which by its progress has been proved to be incurable by natural processes, or from its nature is likely to require much time for its repair. The case I have just read adds another to the list, which has been steadily lengthening, in which this practice has proved successful, and it will, I trust, encourage surgeons to carry out the line of practice it illustrates. In lardaceous visceral disease the same line of practice should also be employed.

THE INCUBATION PERIOD OF SCARLATINA, VARICELLA, PAROTITIS, AND RÖTHELN.

BY CLEMENT DUKES, M.D., M.R.C.P.,
PHYSICIAN TO RUGBY SCHOOL AND RUGBY HOSPITAL.

THE incubation period of all infectious ailments is so important a matter that all who can contribute any facts concerning it are, I think, bound to do so. The incubation period cannot always be accurately calculated within twenty-four hours, for the case may not be seen at the very beginning, or it may be seen on the evening of one day and the next case in the morning, and so make a difference of a day in the calculation. I should state, *in limine*, that in all my cases the infectious individual, as soon as discovered, is at once removed from the house, so that there is no possibility of his proving a source of infection after the first few hours; this fact is most important in calculating the days. There is a possible source of fallacy in one's calculations, which it is also most important to bear in mind—namely, slight undiscovered cases going about the whole time and infecting others freely; for instance, in 1874, from May 12th to July 3rd, I had ten cases of scarlatina, which went down without any order, and I could not trace their incubation period at all. Weeks after I found the reason was Mr. J. H. had scarlatina so slightly that he was about with it, and in school, the whole time, infecting at large; this was only discovered by his hands being found peeling when he got home.

THE INCUBATION OF SCARLATINA.

No. of Case.	Initials of Patient.	Sex.	Age.	Date.	Residence.	Possible Source of Infection.	No. of Days Incubating.
1	P.	Male.	—	March 21, 1877	Mr. Wa.	—	—
2	C.	"	—	" 27 "	"	No. 1	6
3	F.	"	—	" 29 "	"	No. 1 or 2	2
4	C.	"	—	April 2 "	"	No. 2	7
5	T.	"	12	May 7, 1879	Mr. Wt.	—	—
6	C.	"	10	" 11 "	"	No. 5	4
7	W.	"	10	" 16 "	"	No. 6	5
8	T.	"	10	" 16 "	"	No. 6	5
9	R.	"	11	" 18 "	"	No. 7	2
10	T.	"	9	" 19 "	"	No. 7	3
11	L.	"	9	" 20 "	"	No. 9	2
12	C.	"	—	" 20 "	"	No. 9	2
13	P. B.	"	11	June 2 "	"	(?)	(?)
14	C.	"	11	" 10 "	"	No. 13	7 (?)
15	W.	"	17	Feb. 21, 1881	Mr. E.	—	—
16	C.	"	16	" 25 "	"	No. 15	4
17	B. I.	"	—	" 25 "	"	No. 15	4
18	H.	"	—	" 25 "	"	No. 15	4
19	H.	"	—	" 26 "	"	No. 17 or 18	1
20	W.	"	14	March 6 "	"	No. 17 or 18	9

Remarks.

Case 2 said, "Sir, I'll tell you who will get ill next, Case 4, for I was with him on March 26th from 3 to 4.30 P.M.; and Case 3 will have it too, for I sat on the sofa here beside him for about twenty minutes on March 26th."

Case 5 (the school assembled on May 2nd, 1879) was probably caught *en route*, as there was none at home or at school (fifth day).

Case 6 (immediately before Case 5 was removed) had some hot words, and "head in chancery," I believe, with Case 5, because the former had hit Case 5's little brother. Otherwise they never had any communication with each other, either in bedroom, school-room, or dining-room.

Case 7 sat near or next to Case 6.

Case 8 sat near or next to Case 6. Brother to Case 5.

Case 9 was in the same set, and at the same table at meals, as the above four. Very great friends with Case 7.

Case 10 sits at school next to Case 7, and at meals opposite.

Case 11 sits next to Case 9 at dinner, and sleeps in next bed.

Case 12 sits next to Case 9 at meals; they occupy the same bedroom and are in the same class.

Case 13, on May 18th, sat next to Case 10 at tea, and was examining his face with Case 10 in the concave surface of a silver spoon. But as we had Case 12 in a bedroom next to Case 13's room, and as Case 13 had to go there every night, and from there every morning, and as the nurse who was nursing Case 12 had to pass several times a day over the same stairs and landing by which Case 13 had also to pass to get to his room, I think the latter source much more probable than the former, which would be on the fourteenth day.

Case 14 rolled over Case 13 at 7 A.M. on June 2nd, as soon as he heard that Case 13 had a sore-throat on purpose to catch it, as he thought it would be such fun. He showed rash on June 10th, so that the throat was bad the day before, and real incubation the seventh instead of the eighth day.

Case 16 worked with Case 15 the night before the latter was removed.

Case 15 was in Case 18's study on Feb. 21st, 1881.

Case 19 was intimate with Case 18, and in the same bedroom as Case 17.

Case 20 sleeps next to Case 18, and shares the same study with Case 17.

SCARLATINA AND VARICELLA AT THE SAME TIME.

No. of Case.	Initial.	Sex.	Age.	Residence.	Scarlatina.	Varicella.
1	W. W.	Male.	—	R.	March 19, 1880	March 29, 1880
2	N. W	Fem.	—	R.	" "	" "

Remarks.

Cases 1 and 2 were placed in the fever cottage on March 19th, 1880, with scarlatina.

On March 29th, 1880, I was asked to see A. and K. W. at home, and found them suffering from varicella. On visiting Cases 1 and 2 at the fever cottage I found both of them just showing varicella spots too.

All four were doubtless infected at the same time by a common infection.

THE INCUBATION OF VARICELLA.

No. of Case.	Initial of Patient.	Sex.	Age.	Date.	Residence.	Possible Source of Infection.	No. of Days Incubating.
1	S.	Male.	—	March 7, 1874	Mr. H.	—	—
2	J.	,,	—	,, 8 ,,	,,	—	—
3	O.	,,	—	,, 22 ,,	,,	No. 1 or 2	14 or 15
4	S.	,,	—	,, 10 ,,	Mr. V.	—	—
5	C.	,,	—	,, 10 ,,	,,	—	—
6	O.	,,	—	,, 24 ,,	,,	No. 4 or 5	14
7	R.	,,	—	Sept. 12, 1877	Mr. H.	—	—
8	H.	,,	—	,, 26 ,,	,,	No. 7	14
9	S.	,,	—	,, 27 ,,	,,	No. 7	15
10	Y.	,,	—	Oct. 1 ,,	,,	No. 7 (?)	19
11	S.	,,	—	,, 1 ,,	,,	No. 7 (?)	19
12	S.	,,	—	,, 13 ,,	,,	No. 9	14 to 16
13	P.	,,	—	,, 13 ,,	,,	No. 9	14 to 16
14	D.	,,	—	Nov. 9, 1878	Mr. L.W.	—	—
15	C.	,,	—	,, 24 ,,	Mr. W.	No. 14	15
16	W.	,,	—	,, 24 ,,	Mr. L.W.	No. 14	15
17	T.	,,	—	,, 15, 1880	Mr. E.	—	—
18	M.	,,	—	,, 16 ,,	,,	—	—
19	M.	,,	—	,, 29 ,,	,,	No. 17 or 18	13 or 14
20	C.	,,	—	Dec. 2 ,,	,,	No. 17 or 18	16 or 17
21	M.	,,	—	,, 2 ,,	,,	No. 17 or 18	16 or 17
22	A.	,,	—	,, 2 ,,	,,	No. 17 or 18	16 or 17
23	O.	,,	—	,, 3 ,,	,,	No. 17 or 18	17 or 18

Remarks.

Case 7 returned to school on Sept. 12th, and sat next to Case 8 for two hours. Next day Case 7 was found to have varicella, and was removed from the house at once.

Case 9 showed spots on Sept. 27th, but was not isolated until the 29th. It was therefore three days infecting.

Case 15 sat next but one to Case 14 in same form.

Cases 18 and 19 were brothers.

THE INCUBATION OF MUMPS.

No. of Case.	Initial of Patient.	Sex.	Age.	Date.	Residence.	Possible Source of Infection.	No. of Days Incubating.
1	C.	Male.	—	Oct. 17, 1873	Mr. H.	—	—
2	B.	,,	—	Nov. 5 ,,	,,	No. 1	19
3	P.	,,	—	,, 5 ,,	,,	No. 1	19
4	S.	,,	—	,, 5 ,,	,,	No. 1	19
5	B.	,,	—	,, 6 ,,	,,	No. 1	20
6	J.	,,	—	,, 10 ,,	,,	No. 1 (?)	24
7	W.	,,	—	Oct. 14 ,,	Mr. A.	—	—
8	T.	,,	—	Nov. 1 ,,	,,	No. 7	18
9	W.	,,	—	Oct. 31 ,,	Mr. M.	—	—
10	D.	,,	—	Nov. 20 ,,	,,	No. 9	20
11	F.	,,	—	,, 2 ,,	Mr. W.	—	—
12	L.	,,	—	,, 16 ,,	,,	No. 11	14
13	H.	,,	—	,, 18 ,,	,,	No. 11	16
14	P.	,,	—	,, 21 ,,	,,	No. 11	19
15	G.	,,	—	Dec. 3 ,,	,,	No. 12 (?)	17
16	M.	,,	—	Jan. 26, 1875	Mr. E.	—	—
17	D.	,,	—	Feb. 12 ,,	,,	No. 16	17
18	S.	,,	—	,, 14 ,,	,,	No. 16	19
19	G.	,,	—	March 3 ,,	,,	No. 17 or 18	17 or 19
20	U.	,,	—	,, 8 ,,	,,	No. 18 (?)	22
21	A.	,,	—	,, 26 ,,	,,	No. 20	18
22	R.	,,	—	,, 4 ,,	Mr. A.	—	—
23	V.	,,	—	,, 21 ,,	,,	No. 22	17
24	R.	,,	—	,, 21 ,,	,,	No. 22	17
25	P.	,,	—	,, 22 ,,	,,	No. 22	18
26	H.	,,	—	,, 22 ,,	,,	No. 22	18
27	C.	,,	—	,, 22 ,,	,,	No. 22	18
28	R.	,,	—	,, 24 ,,	,,	No. 22	20
29	T.	,,	—	,, 24 ,,	,,	No. 22	20
30	O.	,,	—	,, 3 ,,	Mr. B.S.	—	—
31	N.	,,	—	,, 20 ,,	,,	No. 30	17
32	M.	,,	—	,, 7 ,,	Mr. H.	—	—
33	H.	,,	—	,, 25 ,,	,,	No. 32	18
34	C.	,,	—	,, 25 ,,	,,	No. 32	18
35	R.	,,	14	May 26, 1877	Mr. G.	—	—
36	L.	,,	14	June 20 ,,	,,	No. 35	25
37	C.	,,	14	Mar. 10, 1878	Mr. A.	—	—
38	B.	,,	16	,, 26 ,,	,,	No. 37	16
39	S.	,,	16	,, 29 ,,	,,	No. 37	19
40	L.	,,	17	April 3 ,,	,,	No. 37	24
41	M.	,,	15	May 10 ,,	Mr. W.	—	—
42	M.	,,	—	,, 29 ,,	Mr. B.	No. 41	19
43	K.	,,	18	April 27, 1880	Mr. E.	—	—
44	D.	,,	16	May 16 ,,	,,	No. 43	19
45	A.	,,	15	Feb. 15 ,,	Mr. B.	—	—
46	R.	,,	12	Mar. 4 ,,	,,	No. 45	18
47	B.	,,	—	,, 23 ,,	,,	No. 46	19
48	C.	,,	13	Jan. 26, 1878	Mr. W.	—	—
49	U.	,,	—	Feb. 18 ,,	,,	No. 48	23
50	E.	,,	13	,, 16 ,,	Mr. V.	No. 48 (?)	21
51	R.	,,	—	Mar. 2 ,,	,,	No. 50 (?)	15
52	C.	,,	—	,, 6 ,,	,,	No. 50	18 to 20
53	C.	,,	—	,, 8 ,,	,,	No. 50	20 to 22
54	S.	,,	—	,, 8 ,,	,,	No. 50	20 to 22
55	C.	,,	—	,, 20 ,,	,,	No. 51	17
56	C.	,,	—	,, 10 ,,	Mr. A.	—	—
57	B.	,,	—	,, 26 ,,	,,	No. 56	16

Remarks.

Case 17 slept in dormitory on one side of Case 16.

Case 18 slept on the other side of Case 16.

Case 24, brother to Case 22.

Cases 35 and 36 were the only ones that occurred this season. Case 35 was removed from the house the moment he sickened.

Case 36 slept next to Case 35 in the dormitory, shared the same study with him, and was his most intimate friend.

Case 41 returned to school after three weeks' absence; his brother parted from him then for another school, and sickened on the nineteenth day.

Case 42, brother to Case 41.

Case 48's family had mumps at home. The patient returned to school on Jan. 24th, and was constantly with Case 49 from Jan. 24th to 26th.

Case 48 knew Case 50, and went to his school to visit him between Jan. 24th and 26th (or 19th). I did not see Case 50 until Feb. 16th, but he had pain in his parotid on Feb. 14th. He was infecting from Feb. 14th to 16th—seventeenth or fifteenth day.

THE ORCHITIS OF MUMPS.

I believe I have here recorded every case of the orchitis of mumps that has occurred to me, though I admit the possibility that in the hurry of practice I may have omitted to take the notes at the bedside, and then have forgotten to make a note at all.

It will be seen that the orchitis of mumps is not a metastasis, but a complication of mumps that can be watched for; it comes neither before nor after a certain definite time, and it comes only in certain cases—viz., those who have arrived *at* or *beyond* the age of puberty. Unfortunately, in my notes I omitted to note the ages of cases. This fact is a great guide to treatment, for by keeping all likely cases in bed until the ninth day, and carefully taking the temperature, which rises before the pain is felt, and on the slightest rise of temperature applying a hot poultice to the testicles, the severe pain is mitigated, and the acute general symptoms are diminished by the patient being placed thus early under general treatment. The only time I have ever seen orchitis behave abnormally was in Case No. 1, where the orchitis took the place of the parotid swelling on the first day, and the parotids were not touched from beginning to end, but only the submaxillary glands; in this case we had the severest symptoms I have ever seen.

No. of Case.	Initial of Patient.	Sex.	Age.	Residence.	Date of Mumps.	Date of Orchitis.	No. of Days from Mumps.
1	F.	Male	—	Mr. M.	Feb. 2, '72	Feb. 2, '72	1
2	H.	,,	—	Mr. H.	,, 17, '72	,, 25, '72	8
3	D.	,,	—	Mr. M.	,, 27, '72	Mar. 5, '72	7
4	B.	,,	—	Mr. H.	Mar. 5, '72	,, 12, '72	7
5	B.	,,	—	,,	,, 21, '72	,, 29, '72	8
6	L.	,,	—	,,	,, 22, '72	,, 29, '72	7
7	M.	,,	—	,,	July 20, '72	July 29, '72	9
8	K.	,,	—	,,	Oct. 14, '73	Oct. 22, '73	8
9	M.	,,	—	Mr. L. W.	Jan. 26, '78	Feb. 2, '78	8
10	B. S.	,,	—	Away fr. home	May 2, '78	May 9, '78	7
11	M.	,,	—	Mr. B.	,, 29, '78	June 5, '78	7
12	W.	,,	15	Mr. L. W.	June 1, '80	,, 8, '80	7

Remarks.

Case 1 had no swelling of parotid, but the orchitis commenced on the first day. Sisters had had mumps at home.

Case 2 had very acute delirium, followed by hydrocele, paracentesis, and subsequent atrophy of testis.

Case 3 had very acute delirium. Temperature 106°.

Case 5 fainted when orchitis began.

RÖTHELN AND ITS INCUBATION.

I have seen so much of rötheln, in every phase of it, repeated over and over again, that I am led to write a short account of it.

It is certainly neither scarlatina, nor measles, nor a hybrid, but a disease *sui generis*. Although it resembles measles a good deal in the eruption, yet I do not see how it is possible to mistake the one ailment for the other, as is so often done; nor do I believe it bears any relation whatever to measles, any more than varicella does to variola. Out of 63 cases, occurring in May, June, and July, 1877, I find 39 had had measles; 23 had not had measles; and no note was taken of one. Of these cases, one had rötheln on June 20th, 1877,

and then went down with measles on July 15th, 1877, twenty-five days after. Another had rötheln on June 21st, 1877, and measles on July 13th, 1877, twenty-two days after. Another had measles in January, 1877, and rötheln in July, 1877.

In 1878, out of 25 cases, 22 had had measles; 3 had not had measles.

The period of incubation is very difficult indeed to trace, because rötheln is so very infectious, so many go down with it together; isolate as soon as you will, even on mere suspicion, without waiting for evidence, it will spread. I have often thought that it has a very short incubation, but where I have simply collected facts, without any thought about it, and then analysed them, I find it has a long period of incubation. I append some cases. Rötheln varies so much in character and in severity that I am not altogether surprised it is not at once recognised. It may present no symptoms at all except the rash, or it may show severe symptoms and make a patient downright ill. The rash varies remarkably, appearing at first under the skin; then it may assume a diffuse rosy redness during part of its course, or in certain places; or in another case, or in other parts of the same case, it may present only a few sparsely scattered rosy-red minute spots, scarcely amounting to papules, mere dots; elsewhere larger spots, looking more like measles and beginning to be aggregated; in another the skin may be all over one mass of the very brightest rosy blotches, accompanied by intense fever. The clearest way to describe the ailment, so as to make it understood, seems to me to recount a very mild case and a severe one, and let the reader supply the intervening cases in his own mind.

1. *Mild case.*—A boy presents himself to me. "Please, sir, I've got a rash and I thought I had better show it you, although I feel perfectly well." I examine, and may see a few tiny spots; or a few larger spots or blotches of a rosy hue; or a diffuse rosy hue in one part, as at elbows and knees, and spots or blotches in other parts—generally on face and hands and arms first. A warm bath and bed develops more rash; no headache, sometimes sore-throat or reddish eyes, but mostly not; pulse 80, and temperature 99° in the evening, normal in morning. This rash may be all gone in the morning, or may last, coming out in one part, going in in another, for a day or so; then it all goes and is not followed by peeling: the patient feels hungry throughout, and not ill in the least. After about three days in bed, followed by four days of fresh air, he is washed from head to foot with carbolic soap, his clothes are put through the disinfecting chamber, and he returns to school.

2. *Severe case.*—A boy complains of headache and general malaise; slight sore-throat; loss of appetite and drowsiness; looks heavy; eyes red; no catarrh, but a little cough sometimes; slight redness of fauces; skin on exposed parts raised in appearance, but no actual rash; quick pulse and increased temperature. He has a hot bath and is put to bed, when a rash gradually appears on exposed parts first, papular in character, and gradually intensifies in colour, so that it becomes of the brightest rosy hue (not dusky); these papules become blotches, and these blotches gradually spread all over the body until he is one mass of eruption, sometimes with scarcely any intervening natural coloured skin. The rash that came out first gradually fades while the rest is appearing, and the whole process lasts three or four days or more. The eyes and the whole mucous membrane of the mouth and fauces look red, but there is no catarrh; the tongue is coated. Pulse 120 or more; temperature 103° or 104°; great malaise; headache; loss of appetite. All symptoms gradually subside, and the rash is followed by roughness of the skin. After isolation for fourteen days he is thoroughly disinfected and returns to school. Rötheln occurs chiefly in the early summer months, but no period of the year is exempt, and is most infectious; one attack apparently protects from a subsequent one. Rötheln is, without a doubt, dependent on a specific virus, and, in my experience, is unattended by sequelæ. It will be seen that "recent measles" does not protect from rötheln, and "recent rötheln" does not protect from measles. There is a rash produced by some caterpillars which boys and girls are very fond of collecting and playing with, which so much resembles the commencement of rötheln that it occasions a great deal of trouble when rötheln is about, in being sure whether you have only the caterpillar rash or rötheln to deal with. The Oak-eggar, or Bombyx quercus; the Liparis auriflua; the Arctia caja and Arctia villica; and the Common Drinker, Odonestris potatoria, are the chief creatures. Wherever they crawl, or wherever the fingers go that have touched them or cleaned out their cages, there we get a measly rash. As a rule it begins on the fingers; then the eyes are rubbed, and we see measly-looking eyes; then they scratch their face or neck, or if, in cricketing clothes, any part of the body, and there we get a subcuticular and measly-looking rash. So common is this in early summer that I have it always in my mind in making a diagnosis.

INCUBATION.

No. of Case.	Initial of Patient.	Sex.	Age.	Date.	Residence.	Possible Source of Infection.	No. of Days Incubating.
1	C.	Male	14	May 30, 1877	Mr. B.	—	—
2	P.	"	16	June 6 "	"	—	—
3	H.	"	15	" 18 "	"	No. 2	12
4	N.	"	15	" 20 "	"	"	14
5	C.	"	15	" 20 "	"	"	14
6	J.	"	16	" 21 "	"	No. 1 (?)	22
7	B.	"	14	" 23 "	Mr. H.	No. 2 (?)	15
8	M.	"	15	July 8 "	"	No. 7	15
9	S.	"	18	June 20 "	Mr. A.	—	—
10	M.	"	14	" 27 "	"	—	—
11	S.	"	17	July 9 "	"	No. 9 or 10	12 or 19
12	F.	"	—	May 19, 1878	Mr. J.	—	—
13	H.	"	17	June 8 "	"	No. 12	20
14	T.	"	14	May 27, 1878	Mr. H.	—	—
15	N.	"	16	" 27 "	"	—	—
16	B.	"	15	June 10 "	"	No. 14	14
17	A.	"	16	" 10 "	"	No. 15	14
18	T.	"	16	" 12 "	"	No. 14	16
19	B.	"	15	" 26 "	"	No. 16	16
20	H.	"	16	" 26 "	"	"	16
21	P.	"	16	" 26 "	"	"	16
22	F.	"	15	" 15 "	Mr. E.	—	—
23	D.	"	15	" 28 "	"	No. 22	13
24	G.	"	14	" 17 "	Mr. J.	—	—
25	S.	"	14	July 1 "	"	No. 24	14
26	S.	"	15	June 12 "	Mr. A.	—	—
27	B.	"	16	" 14 "	"	—	—
28	C.	"	13	" 27 "	"	No. 26 or 27	13 or 15
29	B.	"	16	" 28 "	"	"	14 or 16
30	F.	"	15	" 29 "	"	"	15 or 17
31	G.	"	15	" 29 "	"	"	15 or 17
32	B.	"	15	" 29 "	"	"	15 or 17
33	H.	"	17	" 30 "	"	"	16 or 18
34	F.	"	14	" 30 "	"	"	16 or 18
35	C.	"	14	" 30 "	"	"	16 or 18
36	J.	"	18	July 19 "	"	Probably (?)	19

Remarks.

Case 3 slept in bed next to Case 2.

Case 4 and Case 2 were great friends.

Cases 5 and 2 were great friends, and were in the same study as Case 3.

Case 6 was in the same bedroom as Case 1; but the disease is so highly infectious he may have caught it by passing or speaking to Case 2; then it would be the fifteenth day.

Case 8 was in the same study as, and great friends with, Case 7.

Case 11 was in the same bedroom as Case 10, and great friends with Case 9.

Cases 13 and 11 were the only two at the time.

Case 16 was in the next bed to Case 14.

Case 17 was in the same study as Case 15.

Case 12, brother to, and in the same study as Case 14.

Case 19 was in the same study as Case 16.

Case 23 was in the same study as Case 22.

Case 25 was in the next bed to Case 24.

EXCISION OF THE TONGUE.

BY WALTER WHITEHEAD, F.R.C.S.E., F.R.S. EDIN.,
SURGEON TO THE MANCHESTER ROYAL INFIRMARY, AND SURGEON TO THE MANCHESTER AND SALFORD LOCK AND SKIN HOSPITAL.

(Concluded from page 700.)

IN the cases before mentioned we have illustrations of the three possible directions in which this morbid process can extend. In the ichthyosis there are the superficial and lateral extensions; in the papilloma the upward growth, and in the ulceration the deep penetration, and, as it is the direction of the growth which not only regulates the history of such cases, but also their final results, we must recognise in it a feature of the greatest clinical value. In the cases where the disease is superficial the lymphatic glands are late in becoming infected; but where the morbid process follows the direction of the lymphatic channels, glandular complications

rapidly take place, and it is on these grounds we explain the long duration without gland affection in some cases, and the immediate liability to recurrence after removal in others, and it is from this knowledge that the operative procedure in the individual case should be mainly governed.

What could be more suggestive of the possibility of intercepting the disease than the history of these cases, and in what respect does the surgery of the present day fail to accomplish this apparently simple task? The majority, and, we must admit, the very large majority, of those suffering from cancer of the tongue die from a recurrence of the disease after operation; and although we have the satisfaction of knowing that the fault is not entirely our own, as most patients decline to be operated upon until operative treatment is hopeless, nevertheless we are to a great extent responsible when we undertake to operate and stop short of removing the whole of the disease. It is in these cases that life and the reputation of surgery are frequently and unnecessarily sacrificed. If the cancer recurs, we know from the nature of the disease that some part of the morbid structure has been left behind; but if a permanent cure follows, the converse is equally certain. The fact that a few isolated cases of removal of the tongue affected with epithelioma remain free from disease for many years is of little value in the face of the vast number of cases that end fatally within a few months from a recurrence of the disease; nevertheless, a single well-authenticated case of recovery is sufficient to disprove the dogmatic assertion that every case operated upon eventually dies from a return of the disease either in the floor of the mouth or in contiguous glands. If instead of a few cases a number could be proved to have made permanent recoveries, surgery would receive an impetus which would never be allowed to subside.

With the object of obtaining some definite and reliable information concerning the ultimate results after removal of the tongue for epithelioma, I have distributed to nearly every hospital in the kingdom forms which I have carefully drawn up for the record of cases. I now possess some 250 returns, form which I have obtained considerable information, and many valuable suggestions; but as the mere recital of statistics would be out of place on the present occasion, I reserve them for a more suitable opportunity.

In 1872 I published in THE LANCET the particulars of an excision of the entire tongue by the galvanic écraseur. The patient at the time I operated was in her sixty-ninth year, and I have recently had the satisfaction of seeing her in perfect health at the age of seventy-eight. There has never been any sign of the disease returning, and there never was the slightest doubt entertained by the many who examined the case of its being well-marked epithelioma. The interest of this case is somewhat increased by the fact of her brother having previously died from epithelioma of his lip. In this case eight years have elapsed without recurrence of the disease; but in a case recently published by Professor Buchanan, an interval of fifteen years had occurred without any return of the disease. To these cases must be added a patient of Billroth, who lived five years and seven months, and another four years. A man operated upon by Nunneley lived four years, and eventually died of an independent disease. Hutchinson mentions four patients living and quite well at periods of three years or more after the operation, in whom the microscope left not the slightest doubt that the disease was a cancer; and in one case Mr. Lund removed a portion of the tongue of a man who two years afterwards suffered from an epithelioma of the lip, which was removed, and the man is alive and well at the present time. There are also other cases recorded as recoveries where the nature of the disease is more equivocal. Scanty as the evidence may appear, there is sufficient to suggest at least that if the whole of the disease is removed reasonable prospects of permanent cure may be entertained.

The different ways of removing the tongue have been so often described of late in English and foreign journals, and the subject has been so exhaustively discussed in our own and in Continental Medical Societies, that it would serve no good purpose if I dwelt upon each operation separately. The object of all is to remove the whole of the disease, and which is the one that best fulfils this purpose can only be proved by the results after more extensive experience. At present the data are insufficient to form a definite opinion, and, pending the publication of more cases, we must rest content to act according to our individual judgment, and commence, I trust, to submit the whole of our cases to more general scrutiny and comparison. I have now had considerable experience in removing the tongue by most methods that have been advocated, and, as the main features of all may be reduced to the three principles of crushing, burning, and cutting, I may perhaps be allowed very briefly to refer separately to each. I object to crushing, as effected by the écraseur, on the ground that it more frequently than not fails to accomplish the object intended. If the tissue of the tongue is friable, the mere weight of the instrument has been known to remove the tongue without the exercise of its special action. If the structure of the tongue is firm, either the wire generally breaks or fails to prevent hæmorrhage. Removal of the tongue by the galvanic écraseur, and the galvanic or the thermo-cautery, has led me to conclusions shared by many other surgeons, that the risks to life are materially augmented, that the instruments are difficult of precise application, that the operation is frequently followed by secondary hæmorrhage when the eschar separates, and that it is more prone to engender conditions favourable to septic dangers than any other mode of procedure.

A very important opinion was recently expressed at the Clinical Society by Professor Stokes, from which I very materially differ, and notwithstanding the opinion comes from so eminent an authority, I feel bound to express opposite views. He stated "that he had noted that the removal of the organ by a cutting operation is not only more liable to be followed by hæmorrhage, but also, what is of more serious moment, by septic infection." This statement is somewhat surprising, as it is directly opposed to the conclusions drawn from the returns of over 250 cases. My own experience would induce me to say that the danger from hæmorrhage when either the knife or scissors is used is simply *nil*, as the arteries should they require it, which is not always the case, are either twisted or tied. I do not admit that, because in some of the cases where the tongue is removed by the écraseur no bleeding takes place, the absence of bleeding is the consequence of any action the écraseur may possess in crushing the arteries; on the contrary, I am inclined to the belief that the hæmorrhage stops from pressure, just as it will frequently stop, when the knife is used, by the momentary pressure of a finger. The construction of the écraseur is opposed to the belief that it can strangle within the final loop the arteries of the tongue. It is only necessary to screw up any écraseur to its utmost tension, and then observe how much larger the tightest loop is in comparison with the size of a lingual artery. If the loop is excessive compared with the arteries, what must it be when compared with the lymphatics? If the crushing was conducted by an instrument with blades that came into final contact, I could imagine that arteries and lymphatics might be permanently occluded, and hæmorrhage and septic invasion prevented. The difference between crushing and cutting in the influence over direct septic infection through the lymphatics invites more than passing attention. If it could be shown that the écraseur by crushing occluded the mouths of the lymphatics, as it is credited with closing the arteries, there would be no difficulty in comprehending how one of the channels for the introduction of septic poison into the system would be cut off, and thus would be established the advantage of the écraseur over cutting. But it has yet to be proved that the écraseur is even effectual in crushing the arteries, consequently it cannot be conceded that it closes the lymphatics, which are undoubtedly much smaller. The operation I have finally adopted is the one just described, and, as I have never found any difficulty in boldly removing the whole of the tongue through the mouth, I see no object in dividing the jaw. If the floor of the mouth or the glands below the jaw are involved, I advocate the excision of the tongue through the mouth first, and afterwards the removal of the glands and other structure by an independent incision below the jaw. During the last four years Billroth, who appears to have had by far the largest experience of any surgeon in removal of the tongue, has entirely abandoned the use of the écraseur on account of the enormous mortality, which he estimates at 61·5 per cent. He now commences his operation by tying one or both lingual arteries and removes through the wound made for this purpose, enlarged if necessary, any glands that may be affected, and afterwards utilises the wound as a channel for the drainage of the subsequent secretions from the mouth after removing the tongue. After having filled the wound with antiseptic gauze, the mouth is opened to its full extent by means of Herster's gag, and the angles of the mouth and the lower lip are drawn apart by three double hooks. Where the floor of the mouth is extensively affected, the

teeth of the corresponding side are extracted, and the gums detached from the inside of the lower jaw by means of a raspatory. He then excises the diseased structures by repeated short cuts with a pair of curved scissors. Any hæmorrhage that may occur is immediately arrested by the ligature of any bleeding vessels. If both lingual arteries are previously tied hæmorrhage is nearly absent, and the stump looks pale, like the muscles of a limb after Esmarch's bandage has been used. If only one lateral half of the tongue has to be removed he first makes a median division, and afterwards a transverse section of the affected side. When the operation is completed, the drainage is carefully provided for, and the surface of the wound is cauterised by means of a strong solution of permanganate of potash, or the same salt in powder. After operations have been conducted in this manner Billroth has never experienced cellulitis, diphtheria, or bronchial pneumonia. The temperature remains almost normal, and between the third and seventh day the drainage-tubes are removed. The patients are fed by means of an œsophageal tube for about the first week.

Billroth observes that the tongue can easily be removed with the curved scissors through the mouth, after the lingual arteries have been ligatured, which he regards as a simple matter. The success of his operations by this method amounts to 84·2 per cent., and further testify to the advantage of excision over the écraseur.

From this account it will be observed that the operation of Billroth very much resembles the one I have been in the habit of practising without knowing that any other surgeon relied entirely on scissors for excision of the tongue. The only difference in our modes of procedure appears to have been that Billroth made the ligature of the linguals a preliminary operation, while I left these arteries intact until divided during the excision of the tongue. This is a minor difference, and when the operation involves more than the removal of the tongue Billroth's method is probably to be preferred, as the submental wounds are quite as available for the removal of diseased glands as the one I am accustomed to make subsequently and independently for the same purpose.

I have recently sent to the surgical registrars of hospitals a letter, urging them to adopt some uniform system of recording the results of operations on the tongue for cancer, and I will conclude by taking this opportunity of repeating the grounds upon which I think this desirable.

The past records of excision of the tongue have not hitherto been given in sufficient detail, or in such numbers, as to enable the profession to arrive at any definite conclusions on many vital and vexed questions affecting this operation. Amongst the most important points in dispute I venture to mention that considerable divergence of opinion exists as to whether removal of the tongue for cancer materially prolongs life, or alleviates suffering; which of the numerous methods advocated for removal of the tongue fulfils in the widest sense the objects of the operation; which operation is attended by the least risk to life, and prevents to the greatest degree the dangers from hæmorrhage, immediate and remote, shock, and septic dangers; and which operation is the least frequently followed by a return of the disease, or is attended by the longest interval without any recurrence; the advantage, or otherwise, of partial over complete removal, and the subsequent influence of each on the patient's powers of articulation.

There are other considerations, such as the causes influencing the rapidity of growth; the conditions regulating immediate or retarded implication of contiguous glands; and the connexion between the assigned effects of irritation and initial growth; each consideration requiring the light of accumulated evidence. It is not, moreover, unreasonable to suppose that, with a methodical record of cases, aids may be found that will considerably lessen the difficulties which now obscure differential diagnosis.

There are also many other points in connexion with cancer of the tongue which are associated with doubt in the minds of surgeons, and which can only be settled by a wider field of investigation, based upon more rigid and precise lines of inquiry than those that have hitherto been adopted on this important subject. A large number of cases, carefully recorded on some uniform system, would enable us to decide many of these questions, and it is in the hope that I may obtain the co-operation of those who have it in their power to advance surgery in this particular department that I am prepared to supply to any member of the profession special forms, which, if accurately and generally filled up, must, in the aggregate, eventually prove of the greatest value.

The vital significance and surgical importance of the tongue as the seat of cancer is best appreciated by a reference to the returns of the Registrar-General, which show with what alarming strides cancer is increasing in England. In 1851 there were 5218 deaths from cancer, whereas in 1879, the year of the last report, the deaths amounted to no fewer than 12,799. To make this contrast more conspicuous I have compared the population of the two years with the number of deaths in each, when I find that the ratio of deaths in 1879 was 509 per million, whereas the deaths per million in 1851 were only 290; and on the assumption that cancer will continue to increase at the same rate during the next eighteen years, the deaths per million in 1897 will be 893, or more than three times as many deaths per million as occurred in 1851. How far, as the Registrar-General observes, "this apparent increase is simply due to improved diagnosis, and how far to a real augmentation, is doubtful;" but when we consider that an improved diagnosis is more likely to tell in the opposite direction we have every reason to fear that the returns of deaths from cancer are rather below than in excess of the actual number.

We have only, I regret to say, very imperfect data for calculating the number of deaths from cancer of the tongue, as there is no attempt made in the returns of the Registrar-General to specify the locality of the disease; but suppose, as I believe, from an estimate I have made, that 6 per cent. of the number included in the generic term cancer are cases of epithelioma of the tongue, a percentage which I think will not be found to be an exaggerated proportion, we may assume that 640 people died from cancer of the tongue in this country during the year 1879. The grave character of these statistics cannot fail I think to arrest the attention of thoughtful men, and stimulate the minds of scientific surgeons to increase the means at their disposal of lessening the mortality of this disease, as we have no reason to suppose at the present day that the internal administration of medicines, or that the topical application of drugs, has any material influence in arresting its progress.

ON A CASE OF

HYDATID TUMOUR OF THE LIVER IN A YOUNG CHILD.

BY A. M. EDGE, M.D., M.R.C.P.,
PHYSICIAN TO THE MANCHESTER SOUTHERN HOSPITAL.

HYDATID disease of the liver is an affection which attacks young children so infrequently that the following case seems worthy of record.

S. W——, a perfectly healthy-looking boy aged four years and a half, came under treatment at the Manchester Southern Hospital on the 22nd of September, 1880. Two days before, while playing with other children, a bigger boy took hold of him round the waist and lifted him from the ground. He ran home crying, and complained of pain about the stomach, and on examining him his mother found a swelling in the abdomen.

When he was admitted to the hospital a bulging prominence was found in the epigastrium, rather to the right of the median line. On palpation a globular tumour could be felt about the size of a small orange; it was smooth, tense, somewhat elastic, but not fluctuating. There was no hydatid fremitus, nor was there any pain or tenderness on pressure. It could be seen and felt to move freely with the respiratory movements. On percussion the dulness over the tumour was found to be continuous with that of the liver. There was no general enlargement of the liver; in the right mammary line it measured two inches, but slightly to the right of the median line (i.e., in the line of the tumour) three inches and a quarter. The lower margin of the projection was one inch from the umbilicus. There had been no jaundice or other constitutional symptoms. Owing to unwillingness on the part of the boy's parents nothing was done for two months, during which the swelling increased in size, and approached the surface. On Nov. 15th it was explored by means of the aspirator and a fine needle, and thirteen drachms of fluid were evacuated. The fluid was perfectly clear; it contained no albumen, but abundance

of chlorides, so that, although no echinococci or hooklets could be found under the microscope, there could be no doubt of the hydatid nature of the tumour. There was no urticaria after the tapping, a symptom which is of tolerably frequent occurrence. In the case of a woman under my care, who was aspirated for the same disease three days before, this was a most distressing symptom, continuing more or less for a week. This sequela has been supposed to be due to an escape of a small quantity of hydatid fluid into the abdominal cavity. If this were the true explanation there certainly ought to have been urticaria in this boy's case. Wishing to ensure perfect quiet, I had allowed chloroform to be given, hoping that the small quantity necessary would not be followed by sickness. However, as soon as the needle was withdrawn, violent and repeated retching occurred, so that a drop or two of the fluid could hardly fail to have escaped into the peritoneum. I may add that in neither of these cases was any blood drawn through the aspirator, as sometimes occurs, on account of the possibility of which event Dr. Murchison advised that the aspirator should not be employed. Dr. Bradbury, however, uses it in every case, and a single aspiration has frequently been sufficient to produce cure. According to Dr. Broadbent, simple tapping, without the injection of any irritant fluid, is almost always effectual when the secondary cysts are few in number.

In this case the tumour slowly diminished in size, and two months after the aspiration not the slightest fulness could be felt over the region formerly occupied by the cyst.

There is, I believe, a general concurrence in the opinion that hydatid tumour of the liver, while common in adults, is decidedly rare in young children. Thus Murchison gives a table of 103 cases, in 95 of which the age is given, and of these 95, I find only 10 occurring below the age of ten years. Of these 10, 4 occurred in England, 2 to Dr. Murchison himself, of six and eight years respectively, and one to Dr. Anstie, of six years. The other was a case seven years old, but it was doubtful whether the cyst was really situated in the liver. Of the remaining 6 of Murchison's table, 5 occurred in Australia, in the practice of Dr. M'Gillivray, and one in France. One only of these was younger than my patient—namely, one of the Australian cases, which was a little boy of three years. Of course the disease is very prevalent in Australia, owing to the scarcity and foulness of the water, human beings and dogs frequently drinking at the same source. Of Murchison's 95 cases, 61 occurred in England, all of them older than the case I have narrated. Frerichs, in his work on Diseases of the Liver, says that the youngest case he has met with was seven years of age, but that the great majority have been between thirty and fifty. Davaine, in his treatise on Entozoa, says that hydatids are usually found in middle life; they are most common from twenty to forty years of age, and are almost unknown in young children. He mentions two cases, one of which occurred to Cruveilhier, an infant, who died when twelve days old, in whom the cyst had burst into the intestine, and the other in a girl of four years. Dieulafoy, in his work on Aspiration, gives seven cases, the youngest of which was a child of eleven. The text-books on children's diseases pronounce this affection to be very rarely met with in children. A case in a child of six years, under the care of Dr. Wilson at the Cheltenham Hospital, was reported in April, 1880, and another has been recently recorded in a child of seven by Mr. Lawson Tait.

Manchester.

CASE OF BAYONET WOUND OF THE LUNG.

BY SURGEON-MAJOR J. M. O'FARRELL,
ARMY MEDICAL DEPARTMENT, IN MEDICAL CHARGE OF THE STATION HOSPITAL, LIMERICK.

ON the evening of Sept. 4th, 1881, during the unfortunate collision between the people and police, which ended in the latter firing, John O'K——, a railway porter, and a muscular man in perfect health, was standing on the platform when, he says, a policeman, who was on his right, made a thrust at him with a sword-bayonet, which was fixed to the carbine. He instinctively raised his arm to avert the thrust, and felt the bayonet pierce it. Immediately his mouth was filled with blood, and he became very faint. He managed, however, with the aid of a friend to reach his home (a distance of about 120 yards), but he had to stop several times on the way, being in danger of choking by the blood which was now welling up in an almost continuous stream. Within twenty minutes of the receipt of the injury he was seen by Dr. Delandres. He then seemed very faint, and complained of great oppression about the chest, his pulse could scarcely be felt, and now and again he gave a short cough, when a stream of blood issued from his mouth.

Dr. Delandres examined the external wound (which will hereafter be described), but could introduce his finger only a very short distance. He also made a most careful examination of the chest, but could not find that any of the ribs were broken; he heard, however, gurgling sounds indicating the presence of fluid in the bronchial tubes over the back of the right lung, and even then the emphysema, which afterwards became general, had begun in the vicinity of the external wound. He ordered all the windows to be opened, placed the injured man on his right side, with the wound in the most depending position, and prescribed a mixture of ergot, opium, and sulphuric acid. Dr. Delandres saw the man again late the same night, when the hæmorrhage had ceased.

At noon on the following day he was admitted into Barrington's Hospital, and placed under the care of Dr. Myles. I then saw him, and he was in a most critical state—face sunken and livid, tongue brown and dry, temperature 101°, pulse 120 (small), respiration 36. He coughed frequently, and the expectoration consisted of blood, with a very little viscid mucus. There was emphysema, more marked than I had ever before seen it, over the whole of the anterior of the chest and the lower triangles of the neck. There was also dulness on percussion over the base of the right lung, where coarse crepitation and moist râles were audible. The external wound, about half an inch wide, was immediately below the insertion of the pectoralis major and inside the biceps. Supposing the arm to be in the position O'K—— describes, the bayonet must have traversed a distance of from four inches to four inches and a half to have reached the lung, passing in its transit through the floor of the axilla, in most perilous proximity to the vessels and nerves, and probably entering the chest between the third and fourth ribs. There was a large rent, fully an inch and a half wide, on the external part of the sleeve of the coat which he wore. This rent was about four inches and three-quarters from the acromion, so that the direction of the thrust must have been upwards and inwards. An attempt was made to explore the wound with a probe, but was not persevered in. The injured side was strapped. He was ordered a pill containing one grain of digitalis and a quarter of a grain of opium every fourth hour, milk, and beef-tea.

Sept. 6th: Slept fairly well, expectoration unchanged. Temperature 99·4°, pulse 120, respiration 30, tongue more moist. No change in emphysema or condition of base of lung. To continue treatment.—7th: Slept well. Expectoration contains much less blood. Temperature 101°, pulse 100, respiration 20. No change in amount of emphysema. Dulness over base of lung less marked. Ordered a dose of house mixture and to continue opium and digitalis.—8th: Slept well. Temperature 100°, pulse 90, respiration 20. Emphysema somewhat less, dulness on percussion less, and moist râles less distinct. To continue treatment.—9th: Passed a very good night. Temperature 101·8°, pulse 84, respiration 20. Emphysema less, tongue cleaning. Amphoric resonance over the middle and upper part of left lung posteriorly. Expectoration contains very little blood. To continue treatment.—10th: Temperature 99·8°, pulse 90 (very feeble), respiration 20. Amphoric resonance less distinct. Ordered four ounces of whisky daily.—11th: Temperature 100°, pulse 84, respiration 18. No blood in sputa. Amphoric resonance quite gone. Emphysema much less.—13th: Temperature, pulse, and respiration normal. Emphysema much less. From this date the progress towards recovery has been uninterrupted, and O'K——, although of course still weak, is now, Sept. 23rd, able to take a walk every day.

There are some interesting features in this case. The external wound was very small compared with the size of the weapon with which it was inflicted, and even due allowance being made for the contractility and elasticity of the skin; it was difficult to realise that a bayonet one inch wide could have passed fully four inches through so small an opening, but repeated examinations at the time the injury was inflicted, and afterwards during the progress of the case, satisfied us that no rib was broken, so that the wound of the lung must have been caused by the bayonet.

Again, how did the vessels and nerves escape? The

bayonet probably passed along the floor of the axilla, and the vessels with the nerves extend along the outer boundary of the space much nearer the anterior than the posterior wall; they were also probably carried still more forward by the position of the arm at the time.

The marvellously rapid recovery of the patient, and the comparatively mild character of the symptoms after the first forty-eight hours, afford another instance of the comparative impunity with which a young and healthy man may receive injuries of even so delicate and complex an organ as the lung.

In conclusion, I beg to return my very best thanks to Dr. Myles, who was in immediate attendance on the case; Dr. Holmes, the resident surgeon, and the whole of the medical staff of Barrington's Hospital, for their great courtesy in permitting me to take the above notes, which I hope will not be without interest for military readers, as bayonet wounds are so rare in modern warfare.

Limerick.

WOUND OF LEFT LUNG; AN EXTRAORDINARY CASE.

BY L. E. HOLMES, M.D.

PATRICK M——, a miner, aged thirty-one, was brought to the Working Men's Hospital, Butte City, Montana Territory, on June 18th, 1881, on account of a wound made by the passage of a drill through his left lung. The history of the accident is as follows. While standing with two other miners at the bottom of a mining shaft, 225 feet in depth, on the "Gray Rock" mining claim, a drill three feet one inch in length, one inch and a quarter in diameter at the bit, and weighing eight pounds and a half, fell from the top of the shaft. The men below heard it striking the timbers from side to side as it came down, and two of them jumped aside to the corners of the shaft, while the patient stood still with his shoulders slightly dropped forwards. The bit of the drill struck him between the superior angle of the left scapula and the spine, about two inches from the latter, passing downwards and forwards near the left border of the heart, and emerging at a point on a line with the left nipple and six inches from the centre of the sternum, fracturing the sixth rib, making a wound eight inches and a half in length. The drill passed nearly through, the head seeming to the man to remain in the region of the left armpit; the point emerging struck the ground, bringing the man to the ground upon his face. The patient called upon one of the men standing near him to assist in drawing out the head of the drill, and both pulling together succeeded in doing so. The head was much battered, and must have torn the lung and flesh considerably in passing through.

On entering the hospital the patient was bleeding freely, and in a fainting condition. Air at each expiration passed with a gush of blood from both ends of the wound. Hæmostatics, consisting of gallic acid and ergot, with stimulants, were freely administered, and the openings temporarily sealed. The bleeding ceased readily, but the patient recovered slowly from the shock.

On the 4th of July, sixteen days after the injury, he walked out from the hospital to see the patriotic demonstrations of the citizens. He remained in hospital eight weeks, when he considered himself sufficiently recovered to go to his private boarding house to remain. The wound, or wounds, for it had two open ends, began to discharge matter on the fourth or fifth day, which was very offensive, and became very abundant. For three or four days, once a day, injections of carbolic acid (ten drops to the ounce) were made through the track of the wound with a common Davidson's syringe. These, feeling disagreeable to the patient, were discontinued, and simple dressings used once or twice daily. The offensive character of the pus soon changed, though the abundance continued for several weeks.

The lung has shrunken to about two-thirds its natural size. The respiration at the time of leaving the hospital was 28, and the pulse 90. The wounds have now (August 31st) ceased to discharge, and have closed, except the lower one, which, with no perceptible opening, merely moistens the dressing during the night. Since leaving the hospital the patient has gained much flesh, and says he feels nearly as strong as ever. There was never any marked pleurisy and no great amount of fever at any time during his stay in the hospital. The patient was treated principally while in hospital, and subsequently, by my partner, Dr. W. M. Hendrickson, to whose careful attention he owes, in a great measure, his speedy recovery. I have reported this case more on account of its extraordinary character than for any particular surgical interest it contains.

Montana.

DIABETES INSIPIDUS TREATED BY ELECTRICITY.

BY C. P. B. CLUBBE, L.R.C.P. LOND.,

LATE HOUSE-SURGEON TO THE KIDDERMINSTER INFIRMARY.

C. H——, aged thirty-five, housewife. This woman presented herself as an out-patient at the Kidderminster Infirmary in October, 1878, suffering from diuresis. She was at that time passing from eighteen to twenty pints of urine per diem. It was light-coloured, of very low specific gravity, and contained no sugar. The drugs that are recommended for this disease—namely, iron, nux vomica, valerian, and bromide of potassium, were all tried in turn, but without any marked effect. The woman at this time was losing flesh. She was then ordered electricity (faradaism) to be applied over the region of her kidneys every day for about twenty minutes at a time. In the table below there is given the daily average for each week of the amount of urine in ounces during the time this treatment was continued:—

	Daily average.		Daily average.
1st week... ...	237 oz.	11th week... ...	151 oz.
2nd ,, ...	217 ,,	12th ,, ...	154 ,,
3rd ,, ...	163 ,,	13th ,, ...	154 ,,
4th ,, ...	154 ,,	14th ,, ...	123 ,,
5th ,, ...	138 ,,	15th ,, ...	103 ,,
6th ,, ...	113 ,,	16th ,, ...	130 ,,
7th ,, ...	140 ,,	17th ,, ...	129 ,,
8th ,, ...	157 ,,	18th ,, ...	123 ,,
9th ,, ...	168 ,,	19th ,, ...	108 ,,
10th ,, ...	160 ,,	20th ,, ...	117 ,,

This shows that there was a great improvement up to the seventh week, after this the daily average is seen to vary but slightly. At the end of the twentieth week all treatment was left off. During this time she had improved in her general health. She was seen six months afterwards, and was found much in the same state as when she left off using the battery. She was no worse, but was still passing from six to seven pints of urine daily. This case shows that this treatment (probably the most rational of all) for this disease may be tried with advantage.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv, Proœmium.

FARRINGDON GENERAL DISPENSARY.

CYST IN THE BRAIN; DEATH; NECROPSY; REMARKS.

(Under the care of Mr. F. W. GOODSALL.)

E. D——, aged fourteen years, a ballet girl, had suffered for two or three months from headache, most severe during menstruation; in other respects she enjoyed good health. On September 20th, at 9.30 A.M., she had a sudden attack of vomiting, which recurred at intervals during the day, but was not sufficiently severe to make her keep her bed. At 5 P.M. she became insensible. At 7 P.M., when first seen, the patient was apparently in a natural sleep, but all efforts to make her conscious failed. During the night she revived, and took some milk, but did not speak, and between

5 and 6 A.M. on the 21st she suddenly expired, about twenty hours after the commencement of her illness.

Post-mortem examination, five days after death.—On examining the brain, which had become softened from post-mortem changes, there was found in the left centrum ovale majus, on a level with the corpus callosum and about an inch from its outer margin, a white opaque oval body, about an inch and a half to two inches in length, and three quarters of an inch in breadth; it contained fluid. At its anterior extremity, attached by a small pedicle, was the remains of another cyst, about an inch or more in length; this cyst had ruptured into the anterior cerebral lobe. The pia mater at the base of the brain was congested. No cysts were found in any other organ.

The cysts, and the contents of the unruptured cysts, were kindly examined by Dr. Lionel Beale, who came to the conclusion that they were hydatid; no hooklets, however, were found. The cyst wall was invaded by, and the fluid also contained, a large number of quickly growing fungi.

Remarks by Mr. GOODSALL.—Hydatid of the brain is a very rare form of disease. How the germs enter the system, and become embedded in the brain, whether by the blood or lymphatic vessels, is for the future to determine. In this case, in my opinion, the cysts were formed by a single cysticercus, the presence of two cysts was due to pressure on some portion of the original cyst dividing it into two, the cysticercus remaining in the ruptured portion. An important feature of this case is the evidence it gives that it is possible to introduce into the system so fatal an organism, and the question arises as to the probable exciting cause. That it is taken into the system by means of the food is generally admitted, and the knowledge that this and kindred diseases are found in cattle, pigs, and fish, brings the question of proper food supply for the poor prominently forward. Much has been, and is still being, done, to render the food as wholesome as possible, still the fact remains, that within a short distance of the largest and best regulated markets in England cases of poisoning, due to bad food, are far too common. How is this? That the poor suffer from diseases of this description is not to be wondered at when one sees the kinds of food they eat. Let those interested in this question go to any of the numerous out-door markets in the poorer neighbourhoods on Saturday, Sunday, and Monday, where the costermongers sell and the poor buy. On the barrows he will find meat and fish of all kinds for sale at ridiculously low prices. They are musty on Saturday evening, and occasionally sodden with rain. On Sunday morning the unsold portion, after having been kept during the night in the sleeping-room, or, worse still, in an enclosed yard, in close proximity to the watercloset and drains, is made to look as fresh as possible, and again offered for sale. On Monday the same is repeated, and the meat is put up at a reduced price. If the costermonger is able to sell the meat at fourpence a pound, the price he paid for it must have been small indeed. Perhaps it is the refuse of the market. That this is so cannot be denied, and that this food is injurious to health is proved by the fact that within the first three days of the week we have attending here patients suffering from vomiting, diarrhœa, urticaria, or other irritating rashes, evidences of blood-poisoning from bad food. On Oct. 1st two cases came under my observation, and they seem to me to support this view. Two book-folders, working in the same room, ate a pork chop each, and obtained from the same shop, one on Tuesday, the other on Wednesday. On Thursday the former was feverish, vomited, had furred tongue, and irritability of skin. On Friday, the other was attacked with the same symptoms, but in a more severe form, and she had to cease from work for a day or two.

NORTH STAFFORDSHIRE INFIRMARY.

CASE OF OÖPHORECTOMY FOR OVARIAN DYSMENORRHŒA; RECOVERY.

(Under the care of Mr. SPANTON.)

ROSA T——, aged thirty-three, a domestic servant, was originally admitted into the physician's ward of the infirmary on Oct. 30th, 1880, but was transferred to Mr. Spanton's care on Jan. 23rd, 1881.

The patient, a dark, rather short, spare woman, began to menstruate at sixteen years of age. This continued for a year and then ceased for a period of four years. During this time she suffered much pain every month, but no flow ensued, and when the periods returned they were attended with severe pain, chiefly referred to the ovarian regions. Throughout the twelve months prior to admission the pain had steadily increased, and the menstrual intervals were often a fortnight only or less. The patient was evidently of an hysterical disposition, and the constant pain had increased this tendency. She had been under treatment for a long time previous to entering the infirmary, but without the slightest relief. Six years before she had an attack of pleurisy, but with this exception had no serious illness.

On admission the patient was covered with a well-marked specific secondary rash, which soon yielded to treatment with mercury and iodide of potassium. She was well developed, but thin and worn-looking; her general health seemed fairly good. Great pain was complained of in each ovarian region, and this was much increased by pressure and by the advent of the menstrual periods, when the pain became very intolerable. The uterus was normal in size, and the os was patent and soft; slight leucorrhœa. No displacement. The left ovary, which could be readily felt prolapsed, was enlarged and exceedingly sensitive to touch; the right could not be felt per vaginam, but there was pain of an acute character complained of on pressure externally. Bowels regular; no dysuria. Patient slept badly. She had been under systematic treatment in the physician's ward from the time of her admission without the slightest relief.

On Jan. 23rd she was ordered to take a mixture of ten grains of iodide of potassium with one drachm of the solution of perchloride of mercury, in infusion of calumba, thrice daily, and cod-liver oil. On the 27th the dose of iodide was increased to fifteen grains, and a blister was applied to each ovarian region, after leeches had been applied to the cervix uteri previously.

On March 30th the patient had been slightly salivated. Pain continued just the same. To take fifteen grains of iodide of potassium in decoction of sarsaparilla thrice daily, and compound ipecacuanha powder at night.

On April 19th she continued much the same; seldom had much sleep, and was rarely, if ever, really free from pain, in spite of large doses of bromide of potassium and hypodermic injection of morphia. Matters continued in the same way, without any relief being obtained from various efforts made to procure it; and after a consultation with the other surgeons and explaining to the patient the nature and effect of what was proposed to be done, and the patient expressing her readiness to undergo "anything" for the sake of relief, Mr. Spanton decided to perform oöphorectomy, and to remove both ovaries if necessary.

On June 18th, after the usual preparation for such cases, under the influence of ether both ovaries were removed. An incision, about two inches and a half in length, was made in the linea alba, and the peritoneum carefully divided on a director, some small bleeding vessels having been previously secured in the abdominal wall. The left ovary was then felt for and reached without difficulty, and separately ligatured with strong catgut carried twice round. The right ovary was then found, evidently larger than the left, and in drawing it up a blood cyst on its surface gave way. This ovary was then removed with the Fallopian tube by transfixion and a catgut Staffordshire knot. The pelvis was then carefully sponged out, and, there being no hæmorrhage, the wound was closed by deep and superficial silk sutures, then a pad of dry eucalyptus gauze, with a strip of strapping, and a larger twelve fold sheet of gauze with waterproof outside, over this a flannel bandage. Carbolic spray was used throughout the operation, which lasted about half an hour. The left ovary weighed 145 grs., and contained a number of small cysts. The right weighed, with the Fallopian tube, 205 grs., and in this were numerous small cysts, one which had given way during the operation being as large as a small marble, and containing dark blood. (They have not yet been examined microscopically, but their appearance sufficiently indicate their diseased condition.) At 9 P.M. on the day of operation the temperature was 99·6° F., pulse 96. On the 19th, during the night, the patient suffered considerable pain, for which suppositories of morphia, four in all, were used. At 5 A.M. sickness came on, and returned at intervals. Urine drawn by catheter. Temperature, morning 99·6° F., evening 99·2°. On the 20th she complained of the dressings being tight. Outer dressing was cut through with relief. Sickness almost ceased; pain less. Passed urine easily and voluntarily. Slight metrostaxis came on this morning. Tongue moist, slightly coated. Temperature,

morning 98·8°, evening 99·6°. She slept well without medicine, and in the morning the sickness and pain were gone, though flatulence was rather troublesome. She was quite cheerful, and took nutriment freely. Temperature, morning 99·6°, evening 99°. On the 22nd she was free from pain; had a simple enema. Metrostaxis passing off. Temperature, morning 98·8°, evening 99°. The bowels acted after an enema with relief to flatulence, and on the following day she was quite free from pain, which had never entirely been absent for years before. Temperature, morning 98·8°, evening 100°.

From this time steady progress continued to be made. On the 25th, took solid food freely, and the bowels acted naturally. On the 28th the dressings were removed for the first time (tenth day); the wound was quite healed without any trace of suppuration. The sutures were all removed, and a pad and bandage reapplied. General health good, and continued quite free from pain. On the 29th she was allowed to get up. On July 2nd she returned to the surgical ward quite well, never having felt any indication of the "old pain" since the operation. She rapidly regained strength, and became better than she had been at any time since her admission, nine months ago.

Remarks by Mr. SPANTON.—The question of the propriety of removing the ovaries while in an incipient state of disease being an open one, it would be well for every case to be recorded in order that an accurate judgment may eventually be arrived at. In this instance we have one of those not uncommon cases of persistent ovarian mischief which in spite of all kinds of treatment render life a burden, the patient a misery to herself, and an incessant source of anxiety to her friends. This young woman had been unfit for work in all for nearly two years, and during that period had suffered so constantly as to render her willing to submit to any measures proposed to give her relief. After all other treatment failed to do this in the course of several months' perseverance, the operation appears to me not only fully warranted, but a positive duty. The result has certainly so far justified it, as the patient is now experiencing comfort to which for months and years she has been an entire stranger; and she will soon be in a position once more to earn her living and cease to be, as she has been so long, a heavy burden upon her friends.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Gangrenous Eruptions in connexion with Chicken-pox and Varicella.

THE first meeting of this Society after the recess was held on the 25th inst., Dr. A. W. Barclay, President, in the chair. The session was chiefly occupied in the discussion of the interesting subject of gangrenous skin eruptions following vaccinia and varicella, raised in a paper by Mr. Hutchinson. The speakers limited themselves to the subject of varicella, that of vaccinia being only illustrated by the author of the paper.

MR. JONATHAN HUTCHINSON read a paper on Gangrenous Eruptions in connexion with Chicken-pox and Vaccination, of which the following is an abstract. The paper commenced with a narration of the details of a case which had been briefly brought before the Society two years ago. A child in perfect health was vaccinated with several others from the arm of a healthy infant. None of the other children suffered. In this child nothing unusual happened to the vaccination vesicles, which ran their course naturally. On the eighth day after vaccination, however, an eruption came out on the body and limbs, which three days later was diagnosed by the vaccinator as variola. Some of the spots had at this time become dusky and threatened to slough, and afterwards gangrene attacked large numbers of them. Between the eleventh day and the twenty-first day no surgeon saw the child. It died on the latter date, and, an inquest having been held, the coroner requested Mr. Hutchinson to examine the body and to report on the nature of the disease. The body, which on a former occasion was shown to the Society, and of which drawings were again produced, was that of a well-grown healthy child. It was covered with gangrenous sores, the sloughs being black, and in many instances extending into the subcutaneous cellular tissue. Some of them were as large as a shilling. There were numerous smaller sores on which no gangrene had occurred. They were arranged with tolerable symmetry over the scalp, face, trunk, and limbs, but the hands and feet were exempt. A post-mortem examination by Dr. Barlow showed no disease of the internal organs. The child had died from exhaustion in connexion with the extensive affection of the skin. The author stated that so far as he knew this was the first examination of a gangrenous eruption following immediately upon vaccination, and that he was inclined to regard it as an instance of the vaccinia exanthem running, in connexion with idiosyncrasy, an unusual course. Since the case was first brought before the Society in November, 1879, another almost similar one had occurred in Dublin, and had been carefully recorded by Mr. William Stokes. By the kindness of Mr. Stokes drawings representing the condition of his patient were presented to the meeting. In this instance the patches of gangrene, although larger, were fewer in number and more superficial, and the infant, although for a time in great danger, eventually recovered. The two cases were almost exactly parallel, excepting that in Mr. Stokes's case a much shorter interval between the vaccination and the appearance of the eruption was assigned by the mother. There were, however, great doubts as to her accuracy and truthfulness, since the medical man whom she asserted vaccinated the baby, said that he had certainly not done it on the day that she alleged. The eruptions affected the same parts in the two children. In both the hands and feet were exempt, and in neither did the vaccination-spots themselves become gangrenous. The author next proceeded to another part of the subject, the attempt to demonstrate that chicken-pox does occasionally assume a gangrenous form, and present conditions very similar to those just described in connexion with the vaccinia exanthem. He had, he said, for ten years or more been in the habit of recognising a gangrenous form of varicella, and several patients suffering from it had come under his care at the Moorfields Hospital with suppurative iritis. In some cases the disease had proved fatal, but in the majority the patient recovered, with deep scars, and sometimes with great damage to the eyes. In the worst cases the eruption involved the whole thickness of the skin, and left an abruptly margined, punched-out ulcer. The author quoted from a paper published by Dr. Wilby Stokes of Dublin in 1807, in which this malady was, he thought, clearly described. Dr. Wilby Stokes said that it was well known in many parts of Ireland under the names of "the white blisters," "the eating hive," and "the burnt holes." Dr. Wilby Stokes had noticed the resemblance of the disease to chicken-pox, but had attempted to diagnose between them, alleging that in chicken-pox, fever always precedes the eruption, and that the pustules always dry quickly. The author of the present paper contended that neither of these distinctions would hold good, and drew attention to the fact that Dr. Wilby Stokes had, like himself, observed that the eruption usually occurred in very healthy children, at its first stage was like chicken-pox, that severe inflammation of the eyes sometimes occurred, and that the worst cases ended fatally. The final proof upon which the author relied that the eruption was no other than a modification of varicella was that he had seen it repeatedly occur in one child in a family, whilst several others were going through varicella in its ordinary form. For two examples of this he had recently been indebted to the kindness of his friends, Dr. Barlow and Dr. David Lees, of the Children's Hospital. Of one of these cases a drawing was shown. The author referred to some wax casts in the Guy's Hospital Museum, which, he said, well illustrated the condition which he had been describing. They had been named rupia escharotica, but he could have no hesitation in believing them to be examples of gangrenous varicella. In conclusion, he urged that if the proof were accepted that in connexion with idiosyncrasy in perfectly healthy children the eruption of varicella might occasionally assume a severely gangrenous type, there could be but little difficulty in admitting the same possibility as regards the vaccinia exanthem. By the term vaccinia exanthem he intended to designate a general eruption; sometimes erythematous in form, sometimes lichenoid, and sometimes vesicular, which, although infrequent, is admitted by all experienced vaccinators to be occasionally seen. It has been especially described by Mr. Ceely, and is referred to by Hebra and others. It is of course the analogue of the skin eruption in variola.—The PRESIDENT, in thanking the author, said that, like all

Mr. Hutchinson's papers, it was most suggestive; but not much light was thrown upon the treatment or mode of causation of the affection. He recalled a case of revaccination at the age of seventy-eight, where the vaccine marks assumed a black appearance, showing that it might have been of the same nature as that described by Mr. Hutchinson, and have run a similar course had not the subject been of good constitution.—Dr. CROCKER met with a case which in its termination somewhat resembled those described. It was a child fifteen months old, who at five months had enlarged glands, with bronchitis. At six months it was vaccinated, and this was followed by a papular eruption, which gradually disappeared. Nine months later an eruption came on the legs, becoming papular and pustular. There was an eczematous patch on the head. The pustules spread, ulcerating beneath the scabs, the ulcers varying in size from a shilling to one-eighth of an inch in diameter, and were of various depths. The ulcers began as a red papule, then pustule, and then ulceration occurred beneath the pustule. When advanced, Mr. Hutchinson said it resembled precisely the cases of varicella gangrenosa. The child died soon after in convulsions. The father was tubercular, and the mother was weakly, having had nine children and some miscarriages. About a year before, another child had a similar ulcerating eruption, and died from bronchitis. Another boy suffered from cervical abscesses. Dr. Crocker suggested whether the tubercular diathesis might not have disposed towards the course of the eruption. Another case he saw resembled pemphigus. Greasy applications were harmful, but healing took place under watery applications. The ulcerative eruption was almost limited to the lower part of the body.—Dr. BARLOW had seen cases of the varicella gangrenosa for some years past, and had notes of about fifteen such cases. He thought there can be no doubt, where the eruption is general and simultaneous, as to its being varicella gangrenosa; but there are cases like Dr. Crocker's in which the eruption is local, and he could hardly admit such to be of varicella origin. The cases he had seen began as a vesicle (not a papule), without an areola; the roof of the vesicle collapsed and a punched-out ulcer was left; a "trephine ulcer," he often called it, and the process sometimes is so rapid that in a day or two it may go right down to the bone. He ventured to differ from Mr. Hutchinson on the question of idiosyncrasy. None of the cases of which he had notes were in healthy children; there often was lung disease, and in six post-mortem examinations tubercle was present; so that Dr. Barlow in such cases came to diagnose that tuberculosis would be found. But of course tubercle is very common, associated with many affections, and he did not wish to lay stress upon the connexion in this case.—Mr. PARKER instanced a case of herpes in which the vesicles became gangrenous. The vesicles contained dark blood-stained serum, and he thought the change might be due to decomposition of their contents.—Dr. FAGGE, in adopting "rupia escharotica" in his catalogue, did so because of its general acceptation, although he was aware at the time of pemphigus gangrenosa. Striking as Mr. Hutchinson's views were, he agreed with Drs. Barlow and Crocker that it would be rash to say that all these sloughing eruptions are due to varicella. The models exhibited represented everything that was simultaneously present in the skin when they were made.—Dr. HABERSHON asked, in reference to the term idiosyncrasy of the case, which he deprecated as a confession of ignorance, whether in these children there was any question of congenital syphilis, or whether in any there had been a previous exanthem—e.g., measles or scarlet fever—or any peculiarity as to diet, interfering with nutrition. If the whole of the vesicles appeared at once, it was against varicella, where they arise in successive groups. He confirmed Dr. Fagge's statement as to the extreme faithfulness of Mr. Towne's models.—Dr. DREWITT said that a few months ago there was an interesting case of varicella gangrenosa in the Children's Hospital, other children in the family also having varicella. The gangrenous patches were confined to the inner side of the thighs and labia. Might not these be local groups of ulceration in a case of general eruption? The ulcers healed under balsamic preparations.—Mr. HUTCHINSON, in reply, was disappointed that the vaccinia eruptions had not been criticised. Most of the speakers seemed inclined to adopt the view that there was a varicella gangrenosa. He did not wish to assert that all gangrenous eruptions in children were varicellous, but only that varicella might become gangrenous. He would thus put aside the familiar occurrence of herpes becoming gangrenous. He had not been able to identify cases similar to those he had brought forward which could be referred to any other cause than varicella—i.e., when the eruption was general. In Dr. Crocker's case the child had an eruption nine days after vaccination, so that presumably was a vaccinia eruption; it was followed by immunity for nine months, when it had another eruption, which became gangrenous. He would be content to leave this case as uncertain, but believed it was one of gangrenous varicella. Dr. Drewitt had suggested an answer to Dr. Barlow's point as to the local character of some of the ulcerations; this might be determined by the condition of the skin in different situations, and it seemed liable to occur chiefly in parts which are most liable to local irritation. Localisation of the gangrene was therefore consistent with a general eruption. He must still insist on the term "idiosyncrasy." Dr. Witley Stokes was of the same opinion—that the cases occurred in very healthy children. Of course, many London children are delicate, and many tuberculous; but he believed the tubercle was simply an adjunct, and not a predisposing cause of the gangrene, although the fatal cases might be tubercular. But the most marked forms (as of exanthemata in general) occur in robust children.

Mr. CLEMENT LUCAS exhibited a healthy child suckled by a mother inoculated with syphilis subsequent to its birth. The child was born in December, 1880, from healthy parents. It was suckled by the mother, who contracted syphilis afterwards. The suckling was continued and mercury administered to the mother. He pointed out the distinction between this mode of inoculation from that by direct infection from a mammary disease, and quoted authorities for and against the view that syphilis could be transmitted through the milk. The conclusion he drew was that the virus cannot be conveyed by milk, and if it were contained in the secretion it was rendered harmless in the process of digestion.—Mr. MASON remarked that he had seen two similar cases; one was that of a woman with secondary syphilis suckling a child three months old, and he allowed it to be still suckled, being influenced largely by the teaching of Mr. H. Lee on the subject. He saw the child after it was weaned, and it kept perfectly well; the mother was cured by mercurial remedies. Mr. H. Lee refers to a case which strikingly illustrates this point, where a woman suckled two children at once, her own and another's. The latter child gave her syphilis, but her own child remained healthy, although it was still suckled.

The Society then adjourned.

MEDICAL SOCIETY OF LONDON.

Amputation for Knee-joint Disease in a Phthisical Subject.

AT the meeting of this Society on the 24th inst., Dr. Broadbent, President, in the chair,

Dr. ISAMBARD OWEN exhibited a Healthy Heart from a case of Acute Rheumatism, in which a basic murmur was present. The case was that of a woman, aged twenty-eight, and ended fatally on the twenty-sixth day, owing to a rapid exhaustion and a high degree of pyrexia. From the fifth day a systolic murmur was heard over the cardiac area, culminating at the second left intercostal space, which, softer at first, became louder and rougher. The heart was found after death to be perfectly healthy, except that the walls of the ventricles were somewhat thin at the apex.—The PRESIDENT observed that the case was interesting from the fact that death did not occur from the usual complications of acute rheumatism. The site of the bruit suggested its hæmic origin, and he asked if the woman had been subjected to extreme privation previous to death, and also as to the nature of the treatment adopted.—Dr. OWEN replied that alkalies and quinine were given. The history of the case previous to admission was incomplete.

Dr. STOWERS exhibited a man, aged fifty-one, the subject apparently of a non-parasitic pustular eczema of the chin, but careful microscopical examination of the hairs of the beard revealed the presence of the trichophyton tonsurans, the fungus of common ringworm, and not that alleged to occur sometimes in parasitic sycosis. The disease had probably been contracted at a barber's shop. He thought the parasitic nature of the disease was frequently overlooked, for its detection required most patient microscopical examination.

Mr. THOMAS BRYANT then read notes of a case of Amputation of the Thigh for Disease of the Knee-joint in a man the subject of phthisis (see p. 742).—Mr. EDMUND OWEN said that the first point of interest in Mr. Bryant's report was that the case had been originally taken for one of rheumatic origin; he had seen several cases of acute necrosis and arthritis which had been similarly mistaken, especially in children. Looking at a patient with the complication of joint and visceral trouble, the question should present itself thus: Which is the primary disease? If the lung or liver trouble be secondary to the joint affection operative measures will simplify matters, for a patient might bear up against the one source of exhaustion when he was sinking under their combined influence. One saw a similar state of affairs in the case of the child with disease of each knee-joint. When the worst limb is amputated the other begins to mend. It was well to watch a patient closely, and if lardaceous disease and albuminuria are coming on, or if they show other signs of going down-hill, to operate without delay. Children pick up remarkably, and the albuminuria of amyloid disease subsides after a well-timed operation.—Mr. WALTER PYE remarked that Mr. Bryant had laid it down that one need not refuse to operate in cases of early phthisis. This was also the opinion of the late Mr. Vincent, and the teaching of Mr. Savory. By operation one substituted a clean wound for a foul suppurating surface. He quoted three cases of amputation in advanced phthisis for joint disease, which had been under Mr. Savory's care. The patients had all done well, and the manner in which the wounds took on repair was most remarkable. The night sweats ceased, the general condition was greatly ameliorated; moreover, air again entered the diseased portion of the lung. He quoted a case under his own care in which, though the wound did not heal for a long while, the boy gained flesh, and this occurred after successive amputations at the ankle and the knee. Finally, after a third amputation for disease of the other ankle, the health again improved. This child had not eventually recovered, but it was possible that the operations which had been reluctantly performed had added years to the child's life.—Mr. PEARCE GOULD instanced a case under Mr. Marshall's care for hip-joint disease with advanced lardaceous disease of the liver, associated with albuminuria. The child's rapid recovery after amputation was astonishing. Such operations as amputation were justifiable—like cases of fistula—in cases of early phthisis, but not in advanced lung disease. Surgical opinion on this matter had probably been influenced by the almost certainty with which wounds now healed by first intention as compared with years ago. Possibly the antiseptic method might influence the surgeon now to operate in cases in which he would some time since have refused to interfere.—Dr. GILBART SMITH considered the question opened up by Mr. Bryant's paper was one of great importance in the treatment of disease. It was one which should be discussed in each individual case more than as a general question, for the success of operations performed in phthisical patients largely depended upon the form of phthisis present. In out-patient practice he had seen many cases of consumption in which, notwithstanding the presence of pronounced physical signs, such as those of cavity, yet the chronicity of the disease, the absence of advanced symptoms and the slow loss of weight would warrant him in advising operation if necessary. In cases where the symptoms were out of due proportion to the physical signs, he would be chary of recommending surgical interference, and be guided by the temperature chart and by the course of the disease, rather than by the presence or otherwise of serious physical signs.—Dr. DE HAVILLAND HALL would be influenced in considering the propriety of amputation by the localisation of the lung trouble. With diffuse lung complications the cases were apt to run a rapid and unfavourable course. In Mr. Bryant's case there was no breaking down of lung, and no moist sounds. In other words, the mischief was confined to the apex, which was solidified.—Mr. WALSHAM related two cases under his notice somewhat like that of Mr. Bryant's; in one the patient had lung disease associated with hip-joint disease, and in the other the association was with shoulder disease. It was remarkable how the temperature and general condition improved after his interference with the knife.—The PRESIDENT said it was important to decide, as Mr. Owen had remarked, Which was the primary disease and which the secondary? and that a patient might, as had been suggested, bear one trouble where he could not bear two. He confessed he was surprised to hear of the improvement which the advanced lardaceous liver could undergo after judicious operative interference. He thought that in the author's case catarrhal pneumonia was advancing to unmistakable phthisis.—Mr. BRYANT remarked on the unanimity of opinion expressed by the surgeons present; but said that there was some question as to how far disease of the lung might have advanced when amputation might be justifiable. He thought amputation might be of great therapeutic aid, even in advanced lung disease. That local suppurative disease was apt to be the starting-point of visceral trouble all seemed agreed; and he gave an interesting account of amputation in lardaceous disease which was secondary to joint disease. He thought the question, which was a great one, required more general recognition. Any surgical interference in such a case must be trenchant; excision must not be considered in comparison with amputation.

THE ISLINGTON MEDICAL SOCIETY.

THE first meeting for 1881–2 of this Society was held on Tuesday evening, at the residence of Mr. Cattlin, Highbury-place. The attendance was large. The members were greatly interested and instructed by an address from Professor Ferrier on the Differential Diagnosis of Paralysis, with special reference to the diagnostic use of electricity. Three cases of paralysis were shown—one of left hemiplegia; one of facial paralysis; and one of paralysis of the deltoid, the biceps, and the supinator longus muscles of the left arm in a young man. Professor Ferrier gave to the Society a brief statement of the results of some of his latest experiments as to the common spinal centre of origin of nerves supplying different muscles, and found in them the explanation of the affection of the above set of muscles. This promises to be one of the most striking instances of success in localising nervous function, of which Dr. Ferrier's labours have been so fruitful.

MIDLAND MEDICAL SOCIETY.

THE inaugural meeting of the above Society was held at the Grand Hotel, Birmingham, on October 19th, John Manley, Esq. (President), in the chair. About 160 members of the medical profession in Birmingham and the Midlands were present. The hour from 7 to 8 P.M. was devoted to a reception and general conversazione, during which many matters of interest to the profession were displayed; but the most interesting incidents of this part of the entertainment were various chemical, physical, and physiological experiments shown respectively by Professors W. A. Tilden, J. H. Poynting, and Haycraft, Professors at Mason's College.

At 8 P.M. an address was given by Dr. T. Clifford Allbutt, on "Surgical Aids to Medicine," in which he dealt with some matters which occupy the borderland between medicine and surgery, and while admitting the division of medicine into medicine proper, surgery, and midwifery to be necessary, pointed out the dangers of isolation. Physicians and surgeons have worked too little together, while many of the rules observed by both are ridiculously stringent, the result being that many surgical aids to medicine come too late, and the whole work of our art is discredited. Many an operation is only done "as a last resource," which, performed in due time, might have changed the whole course of the case. He referred to the labours of the ophthalmic surgeon, touching upon the headaches of students, due not to cerebral overstrain, but generally to optical defects in the eye, which are often wholly latent. Optic neuritis was of the utmost value to the physician as a diagnostic sign. Vertigo and cough were often only satisfactorily treated by the aural surgeon, while meningitis not uncommonly resulted from ear disease. Affections of the throat were next alluded to, and the view maintained, "that all cases of scrofula, whether aided by heredity or not, are of septic origin, and are secondary to peripheral irritation." Scrofulous neck could only be satisfactorily cured by free incision and removal of caseous glands. The importance of early surgical interference in certain diseases of the pleura was insisted on, while the difficulty of averting death from

septicæmia in phthisis, the usual cause of death in this disease, was regretted. The success that had attended the surgical treatment of hepatic abscess and cyst was welcomed, and a hope expressed that ere long the surgeon would afford relief in cases of repeated gall-stone colic by direct incision of the gall-bladder. The difficulty of affording relief by operation in certain conditions of the kidney, such as calculus, pyelitis, &c., was largely due to the difficulty of making a correct diagnosis. Improvements in gastrotomy would perhaps some day enable the physician to treat locally gastric ulcers and cure them promptly, or to dilate a strictured pylorus. Hopeful views were expressed of the means afforded by abdominal section of dealing with internal strangulations of the gut. The sad mischief resulting from overlooking pelvic disease, as the cause of sciatica in some cases, was alluded to; and some reference was made as to the value of nerve-stretching in certain conditions; while finally the treatment of stiff or painful joints was touched upon; concluding with a warm tribute to Mr. Lister, whose genius alone had made many of these surgical achievements possible.

A vote of thanks to Dr. Allbutt was proposed by Dr. B. Foster, seconded by Mr. J. Vose Solomon, and carried by acclamation; after which a vote of thanks to the Professors of Mason's College, who had so largely assisted in making the meeting a complete success, was proposed by Mr. Furneaux Jordan, seconded by Dr. E. Malins, and also carried by acclamation. Dr. Tilden replied and the meeting broke up; about sixty, however, remained to take supper, at which the usual toasts were drunk, including one to the visitors, to which Dr. Strange of Worcester and Professor Haycraft replied, the former expressing thanks for the generous offers from Birmingham to aid in making the meeting of the British Medical Association next year successful.

THE DEBATE AT THE OPHTHALMOLOGICAL SOCIETY.

MR. BRUDENELL CARTER calls our attention to an inaccuracy in our report of the above debate. He wishes it to be understood that he stated that in his judgment a phenomenon described by Dr. Hughlings Jackson was a natural result of the ordinary momentary persistence of a retinal impression. There was a patient whose eyes jerked rapidly to his right, and then returned, more slowly, to their normal position. When the movements commenced, he was looking at the corner of a mantel-piece; and this corner, which was toward his right hand, appeared to him to move to the right as his eyes jerked. At the end of its apparent excursion he lost sight of it, and did not recover it until his eyes were once more directed to its actual situation. What happened, Mr. Carter believed, was this: The impression made upon each yellow spot by the image of the mantel-piece persisted during the short period of the movement of the eyes, and was referred by muscular sense to the direction towards which they were turned. By the time they had reached the limit of their movement, the image had faded; but was renewed when they were again directed to the mantel-piece, and so the phenomenon recurred at every jerk. In a subsequent discussion upon uniocular diplopia, for "two prisms on ground glass," read "two prisms, ground base to base upon a single piece of glass."

Reviews and Notices of Books.

Dramatic Singing Physiologically Estimated. By W. H. WALSHE, M.D. London: Kegan Paul and Co. 1881.

DR. WALSHE'S great books (great in the best sense) on Auscultation long ago proved to the medical profession that he possessed a genius for listening to and analysing the sounds which reach his ears. We well remember in our student days how entranced we were by the way in which he succeeded in reducing to order sounds which to us had hitherto seemed chaos, and how, by pointing out the varied elements (pitch, duration, intensity, quality, and the like) of which auscultatory signs are composed, he succeeded in making the stethoscope an agreeable minister of our education. Walshe listening to sounds within the chest might be compared to a Costa listening to an orchestra, and just as the latter has the power of appreciating the exact part played by each instrument in the production of the total effect, so had (and has) the physician, owing to the great delicacy of his sense of hearing, an extraordinary power of appreciating the exact cause of the failure of the circulatory and respiratory mechanism to produce sounds which we characterise as normal.

The very remarkable little work which is the subject of the present notice shows us, we think, that if Dr. Walshe had not been a physician he might have been a Costa. It also is a good example of the way in which talents which to the casual observer have no connexion with medicine may minister to the success of a physician or surgeon, and substantially serve the progress of medicine as a science. There can be no doubt that Walshe's musical ear has served to advance medicine just as the artistic talents of Sir Charles Bell and Sir Robert Carswell served to materially improve the sciences of surgery and pathology. This book might not inaptly be called the Auscultation of Dramatic Singing, and it is an attempt to furnish critics and amateurs with some solid criteria for estimating the real rank and value of different singers quite apart from the estimate formed by that "deformed thief" fashion.

To make a dramatic singer there must be combined in one person: (1) Voice; (2) power of vocalisation; (3) power of dramatic expression. This is Dr. Walshe's proximate analysis, and he then proceeds to something like an ultimate analysis of each of these primary divisions. The different attributes of a voice are eight in number—namely, compass, volume, sustained power, equality of power, quality or timbre, feelingness, certainty, and freshness. To each of these attributes is assigned a numerical value. Thus the amount of each which must necessarily be present in any voice capable of being used dramatically is taken as zero, and excess or deficiency of any attribute is marked by plus and minus signs. These numbers are necessarily arbitrary, though they cannot but be of service by compelling the critic to give a careful and analytical attention to the singer. For example, the ordinary compass of trained voices capable of being used without effort being two octaves and a quarter, that compass is taken as zero. To excess of compass is assigned a maximum of ten plus marks, while deficient compass is penalised to the extent of five minus marks. Each attribute is treated in the same way, and the result is that the eight attributes of the singing voice give collectively a power to the critic of swinging, so to say, to the extent of seventy marks on either side of his zero.

The act of vocalisation is in like manner resolved into six elements—namely, intonation, time, production of voice and articulation, flexibility and fluency, transition from chest to falsetto, vocal style and embellishment. In the section devoted to vocalisation occurs perhaps the most interesting passage in the book—namely, the discussion of the physiology of intonation, or singing *in tune*. Nothing so offends the musical ear as singing out of tune, and it is asserted that to musical ears the offence is inversely as the quantity; that phrases "half a tone flat" are less annoying than if the defect amount to only a small fraction of that semitone. In singing from sight without instrumental accompaniment, the production of true intonation involves:—1. Accurate memory of the notes, &c. 2. Healthy brain function to recommand the production of notes of identical pitch. Dr. Walshe asserts that there must be in the brain a special "tone centre." 3. Healthy nerves between the tone centre and the vocal organs. 4. Healthy vocal cords and vocalising muscles. 5. A normal condition of the resounding cavities. 6. The power of intuitively fixing a definite sliding measure of tension, thickness, and length of the vocal cords in *piano* and *forte* utterances, to balance the tendency of those cords to heighten the pitch when the air-current through them is increased in force, and *vice versâ*.

7. Absolute precision in various changes in the position and form of the windpipe, designed to ensure its vibrating in unison with the cords. 8. Precise adjustment of the membrana tympani to the ever-varying pitch, and a healthy condition of the tensor tympani. 9. A normal density and plasticity of the fluid of the labyrinth of the ear. 10. An efficient condition of the organ of Corti, which vibrates in unison with the note produced, and is the means of conveying an impression to the tone-centre of the brain, by which the correctness or otherwise of the tone as produced with the tone as conceived is recognised.

"Considering," says Dr. Walshe, "how inconceivably minute must be the change of length of vocal cord entrusted with effecting each modification of pitch, and allowing their fair share of importance to the number and complexity of the subsidiary dynamic conditions at work in the process (ideation, memory, volition, unconscious cerebration, voluntary innervation, reflex action, muscular sense, and contractility all responding on demand with quasi-electric speed), it must be admitted that rapid and accurately toned vocalisation is one of the most composite and most wondrous acts of life."

Dramatic expression consists in adaptation of style of singing (1) to sentiment to be conveyed, (2) to character portrayed, and (3) in the appropriateness of delivery to the national type of the music. By referring to the figures assigned as value to each of these seventeen elements of dramatic singing, we are enabled to judge of those excellences and defects to which Dr. Walshe attaches most importance. Thus certain qualities are premiated or penalised (according to their presence or absence) to an equal extent; whilst in others mere deficiency is made to count for more or less, as the case may be, than excess.

We regret that we cannot pretend to that wonderful knowledge of singers and operas which Dr. Walshe seems to have. The physiological part of the work we appreciate most highly, but when the learned author begins to apply these principles from his personal knowledge to singers ranging from Braham and Malibran to Gayarre and Patti, and to operas from "Don Juan" to "Lohengrin," we are only able to sit at his feet and listen, and to congratulate him on the many pleasant evenings he has passed, and on the successful manner in which he has made use of his knowledge of physiology to enhance his pleasure, while the musical education of the evening has served but to sharpen the ears for clinical observation.

None of our readers who take any interest in dramatic singing should fail to read this book.

Manuel Pratique des Maladies des Femmes. Par le Dr. G. EUSTACHE. Paris: Baillière et Fils. 1881, pp. 748.

THE preparation of a handbook of any department of science is a most difficult task. Such a book must be a reflection of the actual state of the subject with which it deals at the time of its publication, and must therefore be a compilation; it must also speak with authority, and must therefore be more than a mere compilation; its size must not be excessive, therefore the questions of entire exclusion, of selection, of space to be allotted to each division, must all be considered; lastly, to be successful it must appeal at least to one definite audience. We have enumerated these points because the present work must be judged on some such lines as those we have mentioned. We may add that, of all handbooks, one which deals with diseases of women requires most excuses from the critic who remembers the highly unsatisfactory state of the subject.

With regard to the work before us, we are not quite sure who are the readers to whom appeal is made, whether to students or practitioners, and this makes some difference.

The general plan of the book is pretty complete; indeed, the author includes some subjects (such as extra-uterine gestation) which properly belong to midwifery. The references appear to us hardly satisfactory. They should either have been omitted, or should have included the chief writings on each subject. Our author naturally begins at home, but as a rule America seems nearer to him than Germany; this has not, in our opinion, enhanced the value of his work. The same national prejudice appears in a list of watering-places (p. 258), in which Germany is all but ignored. An author who gives references must be judged by them, and we could give a long list of some of the greatest gynæcological writers whose names and researches are never mentioned; of the works quoted, the last edition is by no means always referred to.

With regard to the matter of the book itself, we are glad to find the author speaks out boldly on several important points. The danger of intra-uterine injections is plainly set forth; the fact that a cervical canal, which will not admit the smallest probe, does not necessitate dysmenorrhœa; the dangers of incision of the cervix, even through the portio vaginalis; the wide normal variations in the position of the uterus; the moderate views with regard to displacements held by the author—all these points deserve commendation. There are, however, several points which seem to us misleading; for instance, vaginitis is said to be commonest between the ages of eighteen and thirty-five. This is no doubt true, but it would mislead a student who did not know that next to gonorrhœa, senile vaginitis is at least as common as any other form. Chronic endometritis is said to be the commonest uterine disease; this is incorrect if the name endometritis is reserved for the body of the womb, as it should be; in this case we find it is meant to include cervical catarrh. Dr. West's views with regard to abrasions of the cervix are not well expressed, and the author should quote from the Croonian lectures to which he does not refer. These erosions are also said, if neglected, to extend in depth and become incurable; this is surely not their usual course, their typical character being absolute want of change in any direction.

Our author is of opinion that vaginal injections ought to be erased from the list of uterine remedies; this seems an extraordinary proposition. He states as a fact that flexions obstruct the uterine canal; he accepts Charcot's explanation of the effect of pressure in the iliac fossa ("on the ovary") in some cases; and he quotes the dictum, "Propter uterum solum mulier est id quod est." All these appear to be the results of compilation rather than his own opinions, but they seem to have been inserted without sufficient thought.

We notice some inaccuracies which should be corrected in a future edition. For instance (p. 560), that an inflamed ovary is of the size of an almond; that oöphorectomy is one of the names of ovariotomy (p. 606); and we think it is time that the names phlegmon and abscess of the broad ligament should be finally banished for all but exceptional cases, especially by the light of recent French researches. It is surely not a correct representation of the present state of experience to say that preliminary puncture of an ovarian tumour should be the rule, or that exploratory incisions are generally fatal.

The chapter on Sterility is not to our insular prejudices particularly savoury, especially as the author recommends artificial impregnation *à la* Marion Sims by the husband or doctor. Apart from all other considerations, such measures are, broadly speaking, useless. It is perhaps pedantic to protest against such barbarous words as "hyperinvolution," "iatro-mécaniciens," and against the derivation "δύς, difficile, παρανδάω" (p. 475); but we may at least plead for an additional "t" in "Mathews" (p. 558), "Hewit" (p. 235), an additional "h" in "Greenhalg" (p. 278), and for the correct spelling of "Winkel" (p. 104), "Hevitt" (p. 325), and

"Natham." That these mistakes are due to the glorious indifference of a Frenchman to all other tongues than his own is proved by the almost faultless correctness of the general orthography of the work.

The book is worthy of improvement in some of the points we have enumerated; its chief defect seems to us to be a want of mastery and consequent want of dogmatism, combined with too ready acceptance of the views and theories of others. It would have been better if the author had more frequently applied his own principle (p. 729): "Que dire de toutes ces choses, sinon que nous ne savons absolument rien de certain à cet égard."

Elements of Agricultral Chemistry and Geology. By the late Professor J. F. W. JOHNSTON, F.R.S., and CHARLES A. CAMERON, M.D., F.R.C.S.I. Twelfth Edition. Edinburgh and London: Blackwood and Sons. 1881.

THERE can be no question of the utility of a book which attains to twelve editions within thirty years, as is the case with this volume. Thirty years ago agricultural chemistry stood upon a basis very different from that which it now occupies, although its advancement has been practically confined to a somewhat limited number of directions. Thus, our knowledge of the composition of soils has been greatly increased, and the relation of organic matter in the soil to growing crops is much better understood. Manures, too, are no longer applied at haphazard, although, as a matter of fact and of necessity, the information obtained in recent years has been gained in a somewhat empirical fashion. Considerable progress has also been made in the endeavour to precisely ascertain the history of the assimilation by plants of their carbon, nitrogen, and other elements. On the other hand, the chemistry of the proximate principles of plants has not been materially advanced, if we except the researches of O'Sullivan and others upon starch and the products of its change, and the investigations of the late Professor Schützenberger and others upon albuminoids. The future of scientific agriculture depends in no small measure upon such studies and their application to the elucidation of the means whereby the principles of plants are elaborated from simple substances.

Bearing upon the subject under consideration, it may be stated here that the incineration of plants conducted with the view of subsequently analysing the ashes is open to a source of error, not guarded against in Johnston's and Cameron's work—viz., the possible expulsion of hydrochloric and sulphuric acids caused by the presence of phosphoric acid.

Although the book before us has evidently been prepared with care, there are yet a few matters which call for critical notice. On page 13 acids are described as "compounds containing hydrogen,"—a laxity of definition which has to be atoned for in a footnote on page 37. Again, the radicles "sulphion," "nitrion," and "carbion" scarcely call for mention in an elementary treatise on agricultural chemistry. On page 22 phosphorus is stated to be a triad, whereas in a table given later on, the same element is classified as a pentad without any remark being made in either place explanatory of its dual atomicity. The authors regard manganese as an element essential to the plants in which it occurs, while the same view is not extended to copper; and what is yet more strange is that both silicon and aluminium are regarded as accidental constituents of those plants in which they are notably found present. If bromine "probably accompanies chlorine and iodine into all plants" (p. 31), but in "such quantity as to defy detection," it might just as well be viewed as absent. In a paragraph which occurs on page 33 sulphur and phosphorus are made to appear as constituents of all nitrogenous compounds. This is evidently unintentional on the part of the authors. The reactions by which ammonia is stated (p. 42) to be naturally formed require to be further substantiated before they can be altogether accepted, and surely there is no sound reason for classifying (p. 72) resins and turpentine with the fats. The value of the information given on page 131 could be increased by giving an explanation of the superior evaporation of water which takes place from sandy soils as compared with clays, &c.

The volume contains a fairly complete account of the important experiments of Messrs. Lawes and Gilbert and the recent observations of the Aberdeenshire Agricultural Association, made upon various phosphatic manures. No mention is found, however, of the investigations conducted by Schlœsing and Müntz and Warrington into the phenomena of vitrification, and it is further singular that there is an entire absence of information concerning the diseases of plants and animals, and the life history of those organisms which have received so much study at the hands of Pasteur and other observers. In reflecting upon the whole volume, it seems to us that while the present edition sustains the good character of its predecessors, it has yet outgrown the elementary stage, and rather calls for development into an exhaustive treatise. In order to adhere to the original intention of the late Professor Johnston, it would be necessary for Dr. Cameron both to abridge and to remodel the book in some respects.

The Imperial Dictionary of the English Language. By JOHN OGILVIE, LL.D. New Edition. By CHARLES ANNANDALE, M.A. Vol. I. A—Depascent. London: Blackie and Co. 1881.

WE welcome with pleasure the first instalment of a new edition of Dr. Ogilvie's learned and comprehensive dictionary. The new edition has, we are informed, been in preparation for above ten years, and the changes, revisions, and additions are so extensive that this edition may be regarded as, practically, a new work. It is estimated that, in all, the dictionary will contain 130,000 words and separate entries. Printed in bold, clear type, it is enriched by upwards of three thousand carefully executed and accurate illustrative engravings on wood. Altogether, it may be safely recommended as, perhaps, the best, as it is the fullest, dictionary of the English language extant.

NEW SANITARY INDUSTRIES.

THE spread of sanitary knowledge among the public has so far made itself felt, that there are now a large number of manufacturers who base their claim for custom almost entirely on the sanitary advantages of products which formerly were in no wise associated with the preservation of health. In no instance, perhaps, is this more striking than in the making of paints. A few years ago paint was simply looked upon as a poisonous article used for decorative purposes. If sanitarians discussed the question of paint at all, it was to denounce its injurious effects and to protest against the prevalence of painter's colic. Now, however, we have a number of sanitary paint manufacturers, and, at the recent Sanitary Exhibition held at South Kensington in connexion with the International Medical Congress, there were three exhibits of this description. The firms in question are known as the Silicate Paint Company of Charlton; the Sanitary Paint Company of Liverpool; and the Albissima Paint Company. In each case the use of lead is condemned, and, however their merits may differ on other points, there is no doubt that all three manufacturers profess to supply the public with a non-poisonous article, and therefore deserve attention. The Albissima paint has already received the highest eulogium, and is credited with unequalled purity

and durability. It is unaffected by the action of gas, and the workmen in no wise suffer from its manipulation. This paint comes to us from the Continent, where it has been largely used, and can be easily mixed with the most delicate tints. Griffith's patent zinc white has been before the public some time, but as we understand that there is an injunction against the sale of this article in England under a heavy penalty, it is barely worth while describing it at any length. It used to be manufactured at the Charlton works, but now is only produced by the Sanitary Paint Company of Liverpool for exportation. It consists of a combination of sulphate of baryta and sulphate of zinc, and undoubtedly offers some advantages from a sanitary point of view. A strong sunlight, however, is said to injure this paint, and it has a tendency to powder and fall off.

These objections the Silicate Paint Company profess to have obviated by manufacturing J. B. Orr's Charlton white in its stead. So far back as the year 1850 it was found that the mutual decomposition of barium sulphide and zinc sulphate produced precipitates suitable as a substitute for lead. Working on this discovery, many pigments were manufactured, but difficulties arose. Though the use of lead was avoided, it was agreed that the sulphates in common with the other salts of barium might be poisonous. Then the specific gravity of the zinc base being different, the homogeneity of the pigment was affected; it became gritty, and yielded in colour to the influence of the sun. With all these objections, to say nothing of the use of baryta as an adulterant, which physically differs considerably from barium, though chemically it is about the same, it became absolutely necessary to discover some new combination. This has been achieved by using strontium instead of barium or baryta, and experience has proved that it helps to preserve the colour of the paint and is less likely to powder. These are important considerations as to mere sanitary excellences, but, if unaccompanied with the commercial virtues of cheapness and durability, would not suffice to ensure the general employment of these innocuous paints. The strontium and zinc pigment known as "Charlton white" also possesses greater covering power than lead paints, and therefore it is commercially superior to white lead, while possessing the great advantage of being non-poisonous in its manufacture and its use. We have also the "Duresco" paint, which will be found of great service where it is necessary to render a porous wall impermeable to damp. It presents a washable distempered surface, and is easily put on any wall, where it runs into the pores, and in drying vitrifies, and becomes so hard that damp cannot pass through. Thus, while the damp from outside cannot enter into the room, the miasma from inside would also meet the same obstacle. Walls would not become the ready absorbants of infection. Further, these paints can be washed with strong disinfectants without fear of injury, and be submitted to sprays of carbolic acid solutions, or of Jeyes' "perfect purifier," in which creasote is used as the antiseptic agent.

In respect to the treatment of walls, Mr. G. E. Pritchett, F.S.A., has a very ingenious method of readily applying Rees' patent metal tiles, which can not only be washed, but will resist intense heat. A Bunsen's burner was applied against them for some time in our presence without in the least altering the colour and design of these tiles; and a wall thus covered might be safely submitted to the action of a flame, as the most energetic method of disinfection. Mr. Pritchett has also invented some portable warming appliances that could be placed within a wall, where they would serve for the purpose of ventilating as well as of heating an apartment or sick ward. They consist of very thin metallic sheets, with sufficient room between them to allow the passage of a film of water, which is heated at the base by a mineral oil lamp or gas. Twenty superficial feet of heating surface is thus produced with the same quantity of hot water as would fill only one foot of a four-inch warming pipe; a great economy of fuel is therefore realised. Placed inside a wall, they would attract the cool air from the outside, and warm it as it passed over their surfaces to enter the room. These metal plates may also be formed into any shape. They might serve as a screen, or be bent so as to fit round a chair, or placed as a table and used for a dish-warmer, and if put under the blankets would keep a bed well heated.

It is argued, however, that what with the heating on the one hand, the imperfections of ventilation and the closing up of the pores of the bricks or masonry by the use of metallic tiles or paints to exclude damp, the atmosphere is likely to be more readily corrupted. Thereupon an artificial lung is suggested, which, like plants, shall be fed on what is poison to animal life. A punkah is made with a perforated or knitted sheet. The framework has at the top a pipe charged with a water solution of one pound of caustic soda to every gallon. By means of little taps this water drips into a little gutter, where it soaks into the hempen or cotton materials of the so-called lung. Another gutter below this sheet receives any excess of fluid which may not have evaporated. The carbonic acid and sulphur vapours contained in the atmosphere would on coming in contact with the "lung" be absorbed by the alkali, and the evaporation ensuing would refresh and cool the air. It is stated that this might be applied to the underground railway for an outlay of a shilling per train. In any case this punkah would be of use in hot climates and crowded hot workshops and factories.

All these inventions have, it will be seen, a distinct bearing on the attempts now so generally made to build in accordance with the laws of health; and are more particularly worthy of study by those who are interested in hospitals and similar institutions. It is needless to remark that the paints to which we have alluded are largely used in such institutions; and that these manufactures are intimately connected with the great question of hospital construction. There is another industry brought into existence by the spread of sanitary knowledge, which we have also been recently called upon to investigate. We allude to the number and variety of disinfecting ovens now brought before the public, and one or two of these certainly merit a special notice. Thus Messrs. Benham and Sons have a new steam disinfecting oven for sheets, blankets, and other objects that moisture will not harm. The wet steam, they urge, should be combined with carbolic acid fumes, and they insist that with moisture no amount of over-heating will damage the clothes; whereas dry heat carelessly applied does sometimes injure the objects disinfected. The door of the apparatus is air-tight, and a regular pressure of steam can be maintained for whatever time is judged necessary. Subsequently the steam can be let out and dry heat produced, so that the articles may be dried in the same oven as that in which they are disinfected. For objects that would be spoilt by damp, the same firm have made in various sizes galvanised gas disinfecting ovens. The gas pipes are most effectually guarded from contact with all clothes, the gas jets so disposed as to give equal heat in all parts of the oven, and the gas cocks are regulated so as to allow of only sufficient gas to pass through to keep up the required temperature, and not enough to burn the articles inside. Then, again, Messrs. Maguire and Son of Dublin have very good disinfecting apparatus, which have been approved by the Local Government Board. They were invented by Dr. Scott; but have the disadvantage of being more expensive than Messrs. Benham and Sons' apparatus. It is suggested that these ovens might be placed between a convalescent ward and a fever ward, so that all objects from the latter might be disinfected on the spot; but there is an opening to supply oxygen to the gas-burners which might be dangerous when the apparatus is not in full working order. The draught might run in the contrary direction, and take some germs from the oven or the fever ward beyond into the other part of the building. Placed out of doors or communicating solely with the outer air, this disinfecting oven would offer many advantages. It is admirably arranged for giving the greatest heat with the least waste, and all can be thoroughly controlled from the outside, and more or less heat supplied without deranging anything.

The excellence of these various objects, the great energy displayed in rendering their advantages evident to the multitude, will not merely prove of benefit to the firms engaged in these trades, but must help to propagate knowledge of sanitary matters. This is therefore a phase of commerce that will excite special interest among sanitary reformers.

Industrial exhibitions at the Agricultural Hall have, for the last three years, provided useful supplements to the larger and less frequent international exhibitions. These exhibitions have a thoroughly business-like character, and are frequented mainly, though not entirely, by persons interested in special manufactures. In the Third Annual National Exhibition and Market of Machinery and Appliances used by Brewers, Maltsters, &c., held on October 17th, 1881, 300 exhibitors have competed, and more than 2000 kinds of articles have been shown. The frontage occupied has been over a mile in extent, and the total value

of the goods exposed is estimated at some hundreds of thousands of pounds.

We found our visit to the exhibition very interesting, and although a detailed description would be out of place in a medical journal, a few scattered notes seem worth preserving.

New filters are evidently multiplying. Messrs. Doulton exhibit Baily Denton's self-aerating and Dr. Bernays' manganous carbon filters, and Mr. Maignen several new modifications of his "Filtre Rapide," which we noticed not long ago.[1] In this ingenious filter a large surface of ordinary or asbestos cloth is coated with prepared animal charcoal by the occasional addition to the water of a suitable quantity of the charcoal. Efficient filtration then goes on with great rapidity, as through an ordinary paper filter, and the old objection to an animal charcoal filter—namely, that when foul it assists in the generation of animal life—is obviated by the great ease by which the surface can be renewed. Mr. Maignen now exhibits a "Poor Man's Filter," designed to meet the wishes of the National Health Society, and a "Tourist's Filter," which is wonderfully compact, and presents all the well-known advantages of animal charcoal, with remarkable facilities for cleansing.

The machinery for producing aerated waters is also of considerable interest. That which struck us most was the apparatus of MM. Mondollot and Co., exhibited by Mr. H. Favager. The generators in these beautiful engines are of two kinds, and each is, in its way, nearly perfection. In the smaller engine sulphuric acid acts on bicarbonate of soda in a vessel similar to the well-known arrangement of the Döhbereiner's lamp, the acid retreating from the salt as soon as the gas begins to accumulate in the generator. In the other, and larger, sulphuric acid runs through a deep loop or syphon of leaden pipe to a mixture of whitening and water. The smallest accumulation of gas in the generator causes the acid to flow back through the syphon, with instant cessation in the chemical action. Thus in each machine waste of material is entirely avoided, while accident from accumulated pressure is impossible. The gas, after a double washing, is perfectly pure.

The apparatus of Messrs. Barnett and Foster claims as its special merit the rapid solution of carbonic acid in water by means of a kind of water spray. Messrs. Hayward, Tylor, and Co. exhibit some admirable machinery for the same manufacture, and particularly a wonderful automatic engine for filling, corking, and delivering soda-water bottles. Mr. James Galloway sends some of the older machines, of great size and finish, and a portion of one which is said to be the largest hitherto made.

Among bottles, Chapman's patent weighted ball-stopper is worthy of notice. It is exceedingly simple, merely an india-rubber ball inside the bottle. No ring or washer of any kind is required, and the bottle is easy to clean and not liable to break. Indents on the glass prevent the ball from falling while the liquid is being poured out.

Messrs. H. and C. Davis and Co. have an excellent show of gas cooking and heating stoves. The "metropolitan family gas kitchener" will do all the ordinary work of a kitchen range and will cook a joint of 10lb. weight in two hours at a cost of three farthings without smell or waste. Gas cooking will, to all appearance, be a matter of course in the future.

HOTEL AND LODGING-HOUSE SANITATION.

THE holiday season is over, and the head of many a family is reckoning the gains and losses, the success or failure, of his annual excursion. A writer in a daily contemporary drew, not long ago, a lively picture of the horrors to be endured by Paterfamilias at any of our seaside watering-places, before he can at last turn his face homewards with those of his family who have not fallen victims to the lethal influences of a "health-resort." Lethal enough they often are, as many of our readers could bear witness. There are probably few members of our profession in middle-class practice who have not to treat, each autumn, several cases of zymotic disease contracted at the seaside. Hundreds of persons every year acquire, during their annual holiday, diseases which could with certainty be prevented by due attention to the sanitary arrangements in hotels and lodging-houses, and many a gravestone at our fashionable watering-places marks the resting-place of one who, seeking health or pleasure, found disease and death.

The extent to which this danger is preventable and is not prevented is a disgrace to our modern civilisation. Health-resorts should not only be models of sanitary arrangement, but also examples of what we may term due sanitary morality. Outbreaks of disease are too often ignored by the indolence or concealed by the cupidity of those who reap a pecuniary harvest from the visitors, and the indisposition to do the inconvenient right, in household sanitation, is nowhere more conspicuous than in the case of those who "accommodate" lodgers. Efficient protection can only be supplied by the compulsory and periodical inspection and regulation of all houses, of every description and grade, into which lodgers are received. Such a compulsory measure is, however much to be desired, far distant in the future. Very much may, in the meantime, be done by voluntary action. If those persons who keep hotels and let lodgings will obtain the inspection of their houses, will rectify sanitary defects, and secure documentary evidence of such rectification, the need for a compulsory measure would be removed. The measure is not hypothetical, for an example has already been set at one watering-place—Ramsgate. Many lodging-house-keepers have there availed themselves of the opportunity to obtain an inspection by, and certificate from, the medical officer of health, and we trust that the example will soon be followed in other places. The value of such certificates depends of course on the competence of the officer giving them, and it depends also on their periodical renewal. It is not enough that the system of drainage in a house should be correct, traps efficient, the soil-pipes ventilated, and the overflow-pipes from cisterns and rainwater-pipes cut off from the sewer. This is the first and most important step, but unfortunately traps and waterclosets have a tendency to get out of order, and therefore periodical inspection is essential. The public, we are sure, will not be slow to appreciate such a system when they are aware of its existence, but will choose the hotels and houses which can present such an assurance of safety. For the diffusion of this knowledge among the public, as well as for the advantage of those who obtain the certificates, it is desirable that these should be duly utilised and should receive publicity. The fact should be stated in all advertisements of hotels, and appended to all cards announcing "Apartments," while the certificate itself should hang in the hall of the house, so that the visitor might at once, by inspection of it, satisfy himself of its existence, and of its recent date. Those who adopt the system will, we are convinced, quickly find the advantage of it, and, once firmly established, a public demand will arise which will soon lead to its general adoption. The chief difficulty in the establishment of such a system lies in the first step; and in this the movement may be, as so many important movements have been, greatly aided by the members of our own profession. Medical men by urging on their many patients who go to such resorts the importance of locating themselves only in such houses as can adduce the needful proof of sanitation, may do very much to create that public appreciation of, and demand for, the system which will secure its success. Once generally demanded and generally adopted, we cannot doubt that, in hundreds of instances each year, life and health would be saved from jeopardy or loss.

The success of the system will, as we have said, depend on the value of the certificates, and this on the knowledge, ability, and impartiality of the medical officers of health. Hence it is of the greatest importance that such qualities should be secured by the careful selection of these officers. At most large seaside resorts the medical officer of health is, we are glad to believe, competent and efficient. The system we are advocating is not utopian. The example of Ramsgate proves, as we have said, at once its practical character, its value, and importance.

[1] THE LANCET, July 23rd, 1881.

THE LANCET.

LONDON: SATURDAY, OCTOBER 29, 1881.

IN two previous articles dealing with the services rendered by the experiments of HUNTER and his pupils on living animals to the elucidation of the principles that underlie the Hunterian operation for the cure of true aneurism, we have seen that at least two appeals to vivisection were needed to give to the method a scientific character and precision—namely, first, the operation on the carotid artery of a stag, adduced by Professor OWEN as demonstrating the establishment of collateral circulation after ligature of a main arterial trunk; and, second, the experiments performed by HUNTER and HOME with a view of testing the truth of HALLER'S opinion that aneurism arises from mere weakness of the arterial wall. It remains to be shown that for the fulfilment of the Hunterian method still further appeals to vivisection were necessary. These were the admirable and ingenious experiments of Dr. J. F. D. JONES, on the natural process by which arterial hæmorrhage is arrested, and published in the year 1805, in a work concerning which Mr. ERICHSEN says, "No subject in surgery affords a stronger evidence of the advantage of the application of 'experimental pathology' to practice than this, as our knowledge of it has been wholly gained by experiments in the lower animals; and by the sacrifice of the lives of a few dogs, donkeys, and calves, those of hundreds—probably of thousands—of human beings are annually preserved."

The application of ligatures for the suppression of hæmorrhage from divided vessels seems to have been recommended and occasionally practised by surgeons from the earliest times; though it is, perhaps, chiefly to the writings and labours of AMBROISE PARÉ in the sixteenth century that we owe their systematic employment in modern times. But from the time of PARÉ down to the beginning of the present century, an almost universal misconception pervaded the minds of surgeons respecting the mode of applying ligatures. In spite of the obvious advantages of tying a bleeding artery, and notwithstanding PARÉ'S influence with his contemporaries and immediate successors, the ligature was at first received with little favour, and in some quarters met with actual opposition. PARÉ'S fellow-countryman, GOURMELIN, opposed it; and GUILLEMEAU, so intimately associated with PARÉ, gave it but scant praise. In the following century both FABRICIUS AB AQUAPENDENTE and HILDANUS condemned it, and preferred to perform amputations with red-hot knives, or with sharp knives made of wood or horn dipped in aquafortis, in order to prevent bleeding by cauterising the vessels as they were divided. DIONIS, who wrote in 1707, is stated to have been the first author of any distinction, after PARÉ, who ventured to recommend the ligature in preference to the cautery for the purpose of stopping bleeding from arteries divided in amputation. The reason of this distrust of the ligature we can now see was well founded, and due to the evils that arose from the ignorance of surgeons respecting the proper mode of applying the ligature, and of its most suitable material and form. This ignorance was only dispelled at the beginning of the present century by Dr. J. F. D. JONES, who first and finally demonstrated the principles of arterial ligation. PARÉ himself had loose and incorrect notions of the way in which a ligature should be applied, and affirmed that the muscular and other tissue surrounding an artery might advantageously be included in the ligature; MOLINELLI recommended that the adjoining nerve should be included in the loop of the ligature, and though the dangers and disadvantages of this practice had been more than once pointed out, SAMUEL SHARP in 1750 declared its alleged ill consequence to be imaginary. HEISTER, obedient to current doctrines, applied the ligature over a compress of scraped lint, in order "to defend the artery before the constriction of the ligature." HUNTER himself jeopardised the success of his first operation by applying four loose ligatures to the vessels; and he included the vein with the artery in his first three cases. DESCHAMPS, about eleven years after HUNTER had performed his first operation, maintained that the artery should be carefully isolated from surrounding structures, and alone tied. Even he was afraid of too great constriction of the vessel, and used a broad flat ligature in order to obtain flattening rather than constriction of the arterial walls, and had recourse to a ligature of reserve. "Everyone," he significantly remarked in 1797, only seven years before the publication of Dr. JONES'S work, "has his own opinion about the way in which the cavity of an artery is obliterated; but, to speak candidly, we must agree that we do not as yet possess any very accurate practical knowledge on this subject." The minds of all surgeons were possessed by a fantastic dread of damaging the walls of the artery by means of the ligature, and numberless expedients were adopted to close the vessel without injuring the coats. Though DESAULT had suggested that the two internal coats of the artery are generally, if not always, divided when the ligature is drawn tight enough to stop the bleeding from a divided artery, he regarded this as an evil, and, with PETIT, DESCHAMPS, and others, flattened the artery instead of constricting it. Dr. VEITCH, on the other hand, during the years 1803 to 1805, had, at the Royal Naval Hospital at Plymouth, observed the practical safety and advantage of small round ligatures in all cases, though he did not fully comprehend their meaning and mode of action. It was reserved for Dr. J. F. D. JONES to elucidate this by experiments upon dogs and horses, whereby he discovered the processes employed by Nature in suppressing the hæmorrhage from divided and punctured arteries, and determined the method according to which ligatures should be applied. In the language of the late Sir WILLIAM LAWRENCE, Dr. JONES "banished (at least in this country) the use of thick and broad threads, of tapes, of reserve ligatures, of cylinders of cork and wood, linen compresses, and of all the contrivances which, employed as a security against bleeding, only served to multiply the chances of its occurrence." By "direct experiment on brutes," as he himself has put it, he first showed that the laceration of the inner and middle coats of the artery, so far from retarding the closure of the vessels, tends powerfully to promote it by inducing adhesive inflammation between the ruptured ends. From an extended series of vivisectional experiments he found that not

only should the ligature be "round and very firm," but that it should be applied with sufficient tightness to divide the two inner coats, adding, as if by way of emphasis, "it is better to tie the artery tighter than is necessary merely to cut through the inner coats, because we shall thereby more certainly keep the cut surfaces in contact."

The reversal of all former modes of applying ligatures, and the overthrow of all antecedent arguments and deductions based not on observation and experiment, but evolved from men's inner consciousness, as to the *modus operandi* of ligatures are, we repeat, due to the knowledge gained by the practice of vivisection. Except for this, the ligature in the hands of most surgeons would still be, what Dr. READ in his lectures at Barber Surgeons' Hall, in 1630, designated it, "a troublesome and dangerous toy," more disastrous and less humane than the actual or potential cauterisings of former days. We will add, for the enlightenment of those who deny the necessity and the utility of "direct experiments on brutes," or who ignorantly or wilfully impugn the honesty and morality of those who practise them, the wise and generous words contained in the concluding paragraph of the preface to Dr. JONES' classical work. "He has," the author remarks, "only a few words more to say, addressed to men out of the pale of his profession, into whose hands this little book may fall, whose opinions he esteems, and whose feelings he honours. He regrets the necessity of obtaining even this important knowledge by the sacrifice of brutes. But when we remember the incessant scourge of war which has followed man through all the ages of his history, not to mention the consequences of accident and disease, it is not too much to assert that thousands might have been, and may still be, saved by a perfect knowledge of these subjects, which can only be directly obtained by experiments on brutes; indirectly, and very slowly, by observations on the injured arteries of man; and even these cannot be made until he has fallen a sacrifice to the want of assistance, or to the imperfect knowledge of the surgeon."

THE profession is probably unaware of the progress steadily made by medical quackery in its diverse forms and disguises. Quackery which is not medical—in the sense of being practised by duly qualified men—is undoubtedly an evil, but its consequences are not comparable with the effects of such quackery as is growing apace within our own ranks, and slowly it may be, but surely, undermining the respect and confidence which the profession has hitherto deserved and received from the public. We sometimes wonder that our calling does not command the warm recognition in certain quarters to which it seems entitled. For a sufficient explanation of this default in the estimation of society, let us look to the prevailing and almost daily increasing popularity of "systems" and "cures" tacitly, if not avowedly, supported or countenanced by the profession. There is a sentimental and mock heroic spirit abroad which burlesques the candour of "truth-seeking" and even mimics the impulses of chivalry. We hesitate to condemn any system, "lest there should be some good in it," and we are too tender-hearted and polite to deal honestly by its promoters, even though we recognise the fallacy of their pretensions, and more than suspect their motives. This is not a faithful line of conduct in reference to our profession, nor is it loyal to Science, which is one of the many constituent parts and aspects of Truth. We know, or ought to know, that a perfectly just and truthful conception of the science of medicine must bar the recognition of *systems* and *cures* of any class or description. The art of healing is not a system, and can never be made one. It is simply an intelligent application of the laws of health in the remedy of disease. We study the "symptoms" of a malady with a view to the acquisition of precise knowledge as to its nature, course, and rational treatment. We pursue the investigation of disease over the boundary line of death, and explore the cadaver with a view to ascertain the effect of the morbid state on the organism and to elicit its organic causes, albeit we too commonly confound effects with causes. We test the powers and analyse the constitution of drugs, and we scrutinise and make careful trial of methods of treatment, to obtain a reasonable acquaintance with their natures and actions. In brief, we take any amount of trouble and resort to every means at our disposal to render the principles and practice of our art *rational*. This is our duty, and it is the only method consistent with self-respect and professional integrity; but if side by side with this policy we cherish a spirit of credulity which renders us ever ready to countenance systems of which we can know nothing—because there is nothing to know,—and take a false pride in showing friendliness to quacks and charlatans, the good work we ourselves may do is changed to evil by reason of the actual or implied sanction we give to the bad work done by others. Nothing is so much needed just now as the rise in our midst of a stern and uncompromising apostle of sincerity in Science—a man of unpitying animosity to humbug in all its forms, who will not hesitate, at any bidding, to denounce wrong-doing and untruthfulness, let who may be the offender. It is time that a spirit of manliness went out in our ranks to chase away the lying spirit of mock courtesy—the faint-hearted and time-serving sentimentality—which makes us so ready to look kindly on any pretender, and so reluctant to expose any pretence.

There cannot possibly be a "system" or "cure" in medicine. There are no rule-of-thumb methods and no *mysteries* in true science. If we do not know what a remedy is, and how it acts, we have no right, as honest men, to employ it. The time has passed for the working of cures by charms and the recourse to nostrums. We pander to the credulity of the unskilled community when we show ourselves credulous. We patronise and encourage quackery when we extend professional recognition to a quack. Every man is a quack—whether qualified or unqualified—who employs a remedy without knowing why, or who adopts a "system" in medicine. The profession must speak out clearly and strongly on this point, and without delay. From the highest places in society to the lowest ranks of the people, there is just now a grievous readiness to "believe in" quacks and quackery. We have ourselves to thank for this most adverse "feeling" and "influence." It is the stirring of the viper we have brought in from the cold, where physicians and surgeons of more robust intelligence than those of to-day left it—the viper we have warmed and fed and brought back to life; and now it is preparing to rise and sting the hand that caressed it. The way to encounter the charlatanry which

is making head against science is to be at once more candid and more conspicuously *honest* in our dealings with the public. We must lay aside the last vestige of the robe of mystery, and show by our words and works, our conduct and policy, that medicine is not a science that admits of inspiration, and that the practice of healing is not an art which can be acquired by the unlearned. There is no system or cure, or charm or nostrum, known to the profession; our calling consists solely in the rational study and treatment of disease on common-sense principles. For those who pretend to a sort of inspiration we have no professional friendship; and towards the promoters of systems and 'pathies we can have no leaning, or any feeling other than that of suspicion, if not pity and contempt. They can have no place in our professional intercourse, and we can have nothing to say to them or their work. This is the only sentiment worthy of the medical profession in its dealings with medical quacks, and the time has come when the revival of its old spirit is most earnestly to be desired.

THE subject discussed by Mr. BRYANT at the Medical Society of London on Monday last is of such interest that no apology is needed for noticing it here. The case which formed, as it were, the text for the disease was that of a young man who for some three years had suffered from disease of the knee-joint, and when he came under Mr. BRYANT'S care there was evidence of consolidation of both apices of the lungs. The thigh was amputated, the wound healed well, and the chest symptoms improved, while the physical evidence of lung disease diminished. In short, it was a case illustrating, first, the possibility of rapid recovery from a serious operation during the course of phthisis, and, second, the fact that the removal of a chronically diseased joint may be followed by improvement in lung trouble. The case is now by no means isolated, but is one of a series, many of which we have published in our columns from time to time. We may study such a case from two points of view, as showing the influence of general disease upon local conditions, and the influence of local disease upon general affections.

It is not difficult to understand why general constitutional states must influence local disease processes, and it accords with all experience and preconceived ideas that the constitutional effects of pulmonary phthisis may retard, or even prevent altogether, the recovery of a chronically diseased joint. Under such circumstances amputation may be demanded for local conditions quite amenable to milder methods in patients of robuster frame. But the question arises whether the same is true of wounds. Do constitutional states play any part, or any considerable part, in the history of a wound? Hitherto the answer to such a question would have been deemed simple and distinct in the extreme—that they did. But it is now asserted, by some of the more ardent disciples of Professor LISTER especially, that our present knowledge of the processes of wound healing, and of the local causes of their failure, has placed us in a position of complete independence of the general systemic condition when called upon to treat a wound. It is asserted that in every case where certain local conditions are observed primary union of wounds may be ensured. We, at any rate, know that the *vis medicatrix naturæ* is especially exerted and manifest in the healing of injuries of all kinds, and that further knowledge merely adds to the occasions of wonder that so grave and complete injuries can be repaired. It is, however, open to us to say that probably constitutional cachexia, as from phthisis, when very marked, may arrest the healing of a wound. This position seems to be in accord with our present knowledge, and for correction will require demonstration of its error, and not mere assertion. The practical outcome of this is, that, granted amputation to be advisable, there are certain stages of the general disease which admit of the operation, while in others it is inadmissible. Where the lung disease has passed into the third stage, and there are cavities surrounded by large masses of caseous lung tissue, where the pyrexia is marked and constant, and the other organic functions are interfered with, it would be unwise to perform any operation not immediately necessary to save life, as the surgeon's wound might not heal, and, continuing to suppurate, would be a constant drain upon the already enfeebled vital powers. This is the rule as applied to operation for fistula in ano, where it has been found to work well, and where also operating during the more severe stages of the disease in disregard of this rule has proved disastrous.

But it is the other view of such cases as Mr. BRYANT'S that is the more important, and was more specially raised by him at the Medical Society. This suggests two questions, Whether, and how far, local diseases of bones and joints may cause and perpetuate phthisical changes in the lungs, and whether, such visceral disease having been lighted up, removal of the diseased bone will ameliorate the condition of the lungs? Although not actually demonstrated as regards man, there is yet every reasonable probability that chronic disease of bones or joints, especially if attended with caseation of inflammatory products, may be the starting-point of genuine tuberculosis. But it is by no means so probable that the more common chronic caseating pneumonia of phthisis is due to any similar cause; and although we cannot assert the negative, and may even be willing to entertain the supposition as one not unlikely to be established as our knowledge becomes more complete, we must at present explain differently the connexion between such bone diseases and the common lung changes of pulmonary phthisis. The two affections may be both regarded as expressions of one and the same "dyscrasia," and a man who from an injury gets chronic caseating ostitis and arthritis may be held to be also predisposed to chronic caseating pneumonia from causes inefficient to produce such results in the robust. The pain, the enforced rest, the confinement to the house or to a close room or the ward of a hospital, disturbed sleep, impaired digestion, and especially the prolonged pyrexia, with its necessary increased oxidation and elimination by the lungs, may each and all bear some share in setting up lung mischief. If to this be added suppuration, with the constant drain upon the blood and the unnatural activity of the hæmatopoietic processes, especially in the lymphatic structures, we have a further link in the etiological chain. Should the disease processes in the lungs be once established, it is still more obvious how all these influences must retard if not jeopardise their subsidence. The harmful influence of bone and joint disease both in the

causation and continuance of phthisis may thus be granted. And if the above expresses *all* the truth, the indications for treatment are plain—remove at once the offending bone or joint. But if the bone disease be of an infective nature, such a course would be merely closing the stable-door after the horse was stolen, if the poison be of a nature to multiply within the body. Amputation of a caseous focus of a general tuberculosis would therefore be useless.

The cases in which this line of practice may be carried out with most hope of success are, then, those in which the pulmonary trouble is distinctly secondary in point of time to the disease of the bone, and where the bone disease is advanced and attended with pain and discharge, while the lung disease is limited in area and early in stage. In proportion as these conditions become altered the indication for treatment gradually shifts, until where the lung condition is primary, very advanced and wide in its area, or is merely a part of a general tuberculosis, and the bone disease is secondary and early and not attended with suppuration, amputation would only be a means of hastening death.

The actual decision in any case is no doubt beset with difficulties. The question serves to illustrate very well our remarks on Specialism in last week's number of THE LANCET. It shows how little our artificial distinction of surgical and medical diseases corresponds with the facts of nature. No surgeon who is not at the same time a good deal of a physician could rightly undertake to decide upon the treatment of such cases as we have been considering, while no physician unless well acquainted with the resources of surgery would be able to give his patients the best chance of life when to their phthisis is superadded some chronic disease of a bone or joint. A consultation is often thought to meet the requirements of such cases. It is supposed that if a physician who can precisely recognise the lung condition, and a surgeon equally able to diagnose the bone lesion, meet together, they will be enabled so to fuse, as it were, their knowledge that the outcome will be a thoroughly sound view of the patient's condition. Nothing is more unlikely. In such cases each bears half the responsibility of the case, and the result of their meeting depends upon their knowledge overlapping the special regions each affects, or upon the mental and moral character of the two men.

THE vice of drunkenness still weighs heavily upon those who give any attention to its ramifications and proportions. Dukes and doctors and leading merchants give their influence and use their example against it and all the habits that favour it. There probably never was a time when so many men with all the means of luxury at their command lived so simply and self-denyingly. Not a few, with wine in their cellars that would have evoked a new ode from HORACE, follow closely the teachings of Nature, that "good cateress," who, however lavish in her stores,

> "Means her provision only to the good,
> That live according to her sober laws,
> And holy dictate of spare temperance."

Could the men of one or two generations back see the wines used, and the wines not used, at dinner by the generation now living, they would not think it the same world as that in which they had lived. Mr. BRIGHT once inadequately described this improvement by saying that in all the years in which he had been familiar with London society he had not seen a gentleman at dinner the worse for any wine he had had. There are reasons for believing that the standard of sobriety in the other orders of society is also becoming more strict, and that workmen are beginning to think drunkenness in one of their class a discredit and a disgrace. Notwithstanding all this improvement, however, the vice of drunkenness is still appalling in all classes of society. It is not so coarse and palpable as it used to be. Men, and especially women, who drink have to distribute their potations judiciously and to use them secretly—so secretly, *or* secretively, that they come to deceive even themselves, and fancy that the world or even their doctor takes them to be perfectly sober people. The profession is not so easily mocked in this matter. It has subtle tests of temperance which patients know nothing of, and so it has come to pass that of late years medical opinion on this subject of alcohol has been most grave and unanimous, all the more grave that it has been moderate and qualified. The experiments of PARKES; the evidence of SANDERSON, BRUNTON, GULL, of Sir HENRY THOMPSON and Dr. RICHARDSON before the Select Committee on Intemperance, and the marked care with which medical men now prescribe stimulants, are well known to all our readers and need not be alluded to in detail here. It is certainly not the fault of the leaders of the profession if every prescription of alcohol is not accompanied with a grave sense of responsibility.

The Press generally, and the teetotal Press in particular, has been lately giving much attention to an address on alcohol by Dr. ANDREW CLARK. It is no mean proof of the gravity with which medical men treat this subject, that one of the busiest of London physicians, during his much needed summer vacation, should respond to an invitation from the teetotallers of a Scotch town to give them his views on it. It is creditable also to the teetotallers that they should, in their crusade against intemperance, have asked for the help of a physician who holds the scales with a judicial hand, and is not prepared to go their lengths in cursing alcohol. Dr. CLARK told the sturdy teetotallers of Galashiels that the young and the healthy were infinitely better without alcohol; that many people using alcohol and thinking themselves the better for it, and looking strong and stout and rosy beyond their fellows, were damaging their most essential organs by what they considered moderation, but what he called excess of the physiological quantity; that he regarded it—this so-thought moderate drinking—potential in the production of gout, heart disease, Bright's disease, and liver disease. But Dr. CLARK stopped short of the shibboleth of the teetotallers. One of his chief words to the intelligent and strong teetotallers of Galashiels was to suggest to them that good and blessed as the work was which they were doing, they might extend it by forming a society of persons who would be bound by "physiological quantity," who would use alcohol only as a diet, and not at random or for social reasons. Many persons, Dr. CLARK argues, would and should join such a society, who cannot see their way clear to join a strictly teetotal one, and whom he, as a physician, could not advise to join. From a medical point of view Dr. CLARK is quite right. We must avoid the intemperance which disparages modera-

tion so long as it is real and not deceptive. If the teetotallers do not see their way clear to the initiation of such a society—and we can understand their difficulties—it should be established independently of them. It would be sure to receive a large medical support. The Duke of WESTMINSTER has recently expressed himself in terms which seem to imply that his countenance would be forthcoming. All classes and churches would be constrained by such a society. It would have the sanction of common sense, of medical science, of religion. It would in every way "make for" temperance. If there were any rivalry between such a society and those more austere ones in which Dr. CLARK found such attentive though critical hearers, it would be a rivalry for good, and in doing good. We do not hide from ourselves that there would be difficulties in defining the restraints to be insisted on in such a society. The "physiological quantity" would be apt to prove an elastic expression capable of abuse. Every man will be ready to set himself up as the judge, and to consider what is grateful to him as a guide to his physiological capacity. This difficulty, however, is not insuperable. We would undertake to say that a dozen leading medical men could be found to formulate rules for the use of alcohol that would involve no danger to health, and be a powerful protest against existing abuses. Another of Dr. CLARK'S suggestions would strike at the root of more than half the intemperance which obtains—namely, that there be no drinking of alcohol save with meals. This is a point on which medical opinion is unanimous. There is nothing but evil as a rule in the practice of taking alcohol without food. Casual drinking at any hour of the day, with any stray companion, on an empty stomach, is to invite disease, and lay the foundation of drunkenness. We devoutly hope, then, to see Dr. CLARK'S suggestion of a Society for the Promotion of Temperance, as distinguished from teetotalism, realised. The Church of England has set a good example in this matter; but a society is wanted with no denominational character, and which will put every man on his mettle, and every woman too, to do something, to make some sacrifice, in the disuse of alcohol, as a substance that has done more to create misery and disease in these kingdoms than any other that can be named.

IN connexion with the important address of Professor LISTER, which we published last week, on the Relation of Micro-organisms to Inflammation, an experimental investigation on the same question by Dr. USKOFF of Cronstadt deserves notice. The results of the experiments, made in the Pathological Institute at Breslau, form the subject of a paper in the last number of VIRCHOW'S *Archiv*. Fluids were injected into the subcutaneous cellular tissue of dogs, those liquids being chosen which have a mechanical or chemical action, care being taken to free them from organisms. The search for the latter in the inflamed tissues was made according to the most approved methods, the investigation being carried on under the personal direction of Professor PONFICK. The conclusions arrived at are the following:—Indifferent liquids, such as water, milk, oil, do not excite such inflammation as leads to the appearance of pus corpuscles, if injected once and not in too large quantity, but they excite active inflammation and suppuration if a large quantity is injected at once, or if several small quantities are successively injected at the same place. Ordinary abscess-pus, even containing bacteria, behaves as an indifferent fluid if it is injected in small quantities. Turpentine constantly excites severe inflammation and suppuration, with the exception that a small quantity dissolved in oil does not cause inflammation recognisable from the exterior. From one series of cases with suppuration, most of them injections of turpentine, micro-organisms were entirely absent, but in another series they were present. The inflammation produced by the injection of a large quantity of an indifferent fluid is to be ascribed to the mechanical injury of the structures, an injury that can be demonstrated post mortem. In the case of turpentine the effect must be ascribed to its chemical action. Since the intense suppuration in some of these cases was unattended by the appearance of micrococci in even the smallest number, USKOFF concludes that the universal dependence of suppuration on organisms, maintained by some, is incorrect. The appearance of organisms in some cases he ascribes to the possible imperfect removal of them from the liquids used when these were in large quantity, or to the circumstance that, by the mechanical injury to the tissues, their power of resistance was lowered. It will thus be seen that his results entirely support the position maintained by Professor LISTER.

Annotations.

"Ne quid nimis."

EXCISION OF A GRAVID CANCEROUS UTERUS.

THE total excision of a gravid cancerous uterus was accomplished for the first time in this country by Mr. Spencer Wells, on Friday last, Oct. 21st. At our last report, four days after operation, the patient was going on wonderfully well. This operation is a combination of Freund's excision of the entire cancerous uterus, and Porro's addition to the Cæsarean section of supra-vaginal amputation of the uterus. The patient was thirty-seven years of age, mother of five children, in the sixth month of pregnancy, and suffering from epithelioma of the cervix. The specimen is now at the College of Surgeons, and will form an important addition to the museum. The case is to be brought before the Medico-Chirurgical Society as soon as possible, and will no doubt lead to a highly interesting discussion.

TYPHOID FEVER IN LONDON.

A SEVERE epidemic of enteric fever is prevailing in London. The general hospitals contain an unusually large number of cases, and at some of the hospitals many patients have been turned away. In the Metropolitan Asylum Fever Hospitals at Homerton and Stockwell there were, during the week ending Oct. 22nd, 110 cases. At the same time, according to the Registrar-General's report, there were fifty-three fatal cases in London, or thirty above the corrected weekly average. The fever seems to be of a severe and virulent type. Last week in a clinical lecture Dr. Southey remarked that the cases which had been admitted into St. Bartholomew's Hospital had been characterised by an excessive amount of rose-rash in adults; by violent and savage delirium, not only in persons who had been addicted to alcohol drinking, but even in children; by the feebleness and dicrotism of the pulse throughout the second and third week; by proneness to sudden death without perforation or peritonitis, but rather from failure of the heart; by the

extreme depression and syncope requiring early and free use of stimulants; and by maintained high temperature. Diarrhœa had not, as a rule, been either excessive or difficult to control.

RECENT CASES OF POISONING.

A SERIES of cases of poisoning have been recently reported, some of which illustrate, in a very forcible manner, the need there is for greater care, legislative or personal, in regard to the accessibility of poisons. A case of death from chloral which occurred on the 7th inst. at Diss, in Norfolk, shows how the exemption of patent medicines from the Act regulating the sale of poisons renders its provisions ineffective. An elderly lady was left at night in her usual state of health, and in the morning was found dead in bed, lying with her head on the edge of the bed, and one hand placed on her mouth and nose. Immediately beneath her head was a medicine-glass, and by the side of the bed was an empty bottle labeled "Hunter's solution of chloral." Two other bottles similarly labeled were in a basket close at hand. From the evidence given at the inquest by Mr. Amyot of Diss, it appeared that the deceased had been in the habit of taking chloral, although she denied it when taxed with the fact. Some years before she had nearly died from an overdose. It appears that a local chemist had refused to supply her with chloral, but she had obtained several bottles of the solution from the "University Stores" in London. The liquid was stated to be simply a solution of chloral, but being protected by the three-halfpenny stamp it was not labeled "Poison." The jury appended to their verdict the very just rider, "That further precautions should be taken by persons who sell such articles, and that the bottles should be labeled 'Poison,' notwithstanding the exemption apparently provided by Clause 16 of the Sale of Poisons Act, the chloral having been issued as a patent article." This exemption of patent medicines is said to have been due to the powerful influence of those engaged in this line of business. It has been too often shown by such cases as this that the exemption was a grave error, which cannot be too soon corrected. The need for such correction is the greater since the number of patent medicines has of late years rapidly increased, although it has not in this country reached the dimensions which it has attained in America, where, according to the President of the Pennsylvania Pharmaceutical Association (as quoted in the *Pharmaceutical Journal*), two-thirds of the total quantity of medicine annually consumed in the United States are sold in the form of secret nostrums. The facility with which so large a quantity of chloral was obtained from a co-operative store is, we presume, to be accounted for by the fact that it was obtained as a patent medicine. In a case in which a poison is sold in solution, as in this instance, ostensibly as such, the fact that it is in the form of a patent medicine does not, we think, morally justify a chemist in supplying it in unlimited quantities, and the sale of poisons at co-operative stores ought to be governed by the same principles, moral and legal, as obtain in a private business.

A foreman at some bleaching-powder works at Flint has died from the effects of drinking a quantity of strong ammonia. Death occurred in about two hours. The quantity of ammonia taken was about five ounces. The symptoms were profuse perspiration, redness of lips and tongue, bleeding from the mouth, and swelling of the eyelids. The pulse could not be felt, and the man was unable to speak. The jury returned an open verdict. There was no direct evidence of suicidal purpose, but so large a quantity could scarcely have been taken with any other intent by a person who, from his business, was accustomed to ammonia.

A death from carbolic acid poisoning, which lately occurred at Gateshead, was the sad result of incaution on the part of a medical man, and teaches a lesson which all practitioners will do well to lay to heart. A local surgeon, Dr. Redmond, having attended a woman in her labour, left at the house his instruments and a bottle labeled "Pure carbolic acid" standing on the window-sill. He gave instructions that no one was to meddle with it, as he was going to use it again in the morning. A woman then went, according to instructions, for a draught, which she received from the doctor's servant. This draught she placed on the window-sill by the side of the other bottle. The two bottles were nearly alike in size, and their contents in colour. The draught bore no label, and the carbolic acid was not labeled "Poison." In this unfortunate combination of events the chances were evidently nearly equal whether the patient would get the draught or the disinfectant. The result was determined, not, as might have been expected, by carelessness, but by ignorance. A neighbour proceeded to give the patient her medicine, took up the carbolic acid bottle, and asked a man what was on it. He read "Pure carbolic acid." This conveyed no information to either of them, and, perhaps thinking that the bottle with a label on was more likely to be the medicine than the other, the woman poured out its contents and gave it to the patient, who discovered the error after she had swallowed so much of it that in two hours she was dead. The jury expressed informally the opinion, that Dr. Redmond was less careful than he should have been in leaving the carbolic acid at the house without a poison label and in an accessible position, and returned a verdict of "Death by accidental poisoning." Doubtless Dr. Redmond will be more careful in future, but the lesson, as we remarked, is for all.

FRENCH ARMY MEDICAL SERVICE.

THE Paris correspondent of *The Times* has brought prominently to notice a very serious blot on the organisation of the French army—the predominant influence of the commissariat. It appears to exercise a controlling power over every other department of the army, but in none is this more striking than in the Medical Service. In every particular the medical officer is under the control of and subordinate to the officers of the Intendance. He is posted to or removed from hospitals or corps at their recommendation; to them he is answerable for the discharge of his duties; and to their report he must look for promotion, for honours, and for rewards. Even in such matters as the selection of the site for an ambulance he is under their orders. This has long been a grievance of the French medical officer, and has been productive of the most serious consequences to the service. The injurious results were well seen during the Crimean war in the losses experienced in the French military hospitals, which amounted to more than double those in the British. The Intendance in fact broke down, and to its shortcomings and neglect of the sanitary recommendations of the medical officers was due that fearful prevalence of fever which decimated the hospitals. *The Times'* correspondent attributes to this cause the very unsatisfactory state of health of the troops now serving in North Africa. He says: "It is not Africa that kills the soldiers, but orders which paralyse the philanthropic activity of the sanitary corps," orders which emanate from the Intendance. The absurd arrangement by which all control in matters affecting the health of the army is taken from the skilled medical officer and put into the hands of those who may fairly be presumed to be profoundly ignorant of sanitary requirements, was brought under the consideration of the Chamber of Deputies last summer in the discussion on the Army Administration Bill (see THE LANCET of June 26th). The statements made on that occasion appeared to produce a considerable impression upon the Chambers, and hopes

were entertained that this anomaly would be got rid of. General Farre requested an adjournment of the discussion that he might introduce a Bill on the subject himself, and what was the result? "After a delay of three months, he declared to the Chambers that everything was for the best, and that if the present situation of the commissariat were interfered with, he could not govern." So that the Intendance was too powerful for the War Minister to interfere with it! The question has been very opportunely raised again in connexion with the sufferings and losses of the army at Tunis. We trust that if M. Gambetta comes into power his War Minister will not be afraid to cope with a system so injurious to the soldier, and that he will lay upon the medical officers the responsibility of carrying into effect any measures they may deem necessary to maintain and improve the health of the troops under their care, at the same time giving them the power to originate and carry through their arrangements without the officious intervention of the Intendance, and subject only to the approval of the officer commanding the troops. If he is able to effect such a reorganisation he will fairly earn the lasting gratitude of the French army.

THE GENESIS OF CARDIAC INFARCTION.

EXPERIMENTAL researches undertaken for one purpose often throw light upon some question altogether different from that which was in the intention of the investigator. This fact is illustrated by some experiments which have been made by Ehrlich of Berlin, in the hope of obtaining some light on the place at which the chief reduction of organic compounds takes place. Instead of this, however, unexpected facts have been ascertained regarding the pathology of cardiac infarction, and its dependence on primary changes in the blood. The experiments consisted in the injection beneath the skin of rabbits of "nitrophenylpropylic acid," a substance which is readily transformed by reduction into indigo. The animals usually died in from twenty-four to thirty-six hours, and then presented parenchymatous inflammation of the larger abdominal glands and of the heart, hæmorrhages in the ocular muscles, and traces of enteric catarrh. The bodies exhibited a remarkable tendency to decomposition, and thus the post-mortem appearances closely resembled those found in the subjects of acute infectious diseases. A large number of the red blood-corpuscles presented a peculiar form of degeneration, such as is sometimes seen in anæmic patients. Within the corpuscle a substance appears to be deposited in a reticulate manner which has a special affinity for certain colouring agents, especially for methylene-blue. To this alteration of the corpuscles is to be ascribed another symptom present in one case—hæmoglobinuria. In this case there were also peculiar changes in the heart. A white infarct occupied the whole surface of the left ventricle, and penetrated to the middle of the wall. The white colour was retained after hardening in bichromate of potash. Section showed that there were also many other smaller infarcts in the muscular substance, especially in the papillary muscles. In these regions the muscular fibres had entirely lost their characteristic appearance. In places fibres were seen which had undergone a tubular degeneration, presenting, in the interior, an elongated cavity, filled with liquid, and pressing the nuclei to the side. Distinct inflammatory changes could not be discovered. Coagula were found in the larger vessels. From the absence of other signs of embolism Ehrlich is inclined to attribute the infarction to a primary alteration in the vessels and consecutive thrombosis. That it is to be associated with the morbid state of blood which caused the hæmoglobinuria is evident from the fact that, in the other animals in which the latter symptom was absent, no such change in the heart could be discovered. He has, however, seen cardiac infarction in the same animals when death has resulted from simple inanition. The heart is then usually enormously dilated, and, especially in the right auricle, there are small whitish spots which are found under the microscope to consist of muscular fibres in a state of necrosis. Some of the morbid appearances on the rabbit's heart corresponded with changes found by Ehrlich in a case in man, in which infarction was due to syphilitic disease of an artery. Similar infarction has also been observed by him in cases which, by narrowing of the nasal orifice, respiratory obstruction was produced, and with it increased action of the heart. In both these cases he believes that vascular changes may have resulted and led to the infarction. The subject is of great importance in regard to the pathogenesis of cardiac changes in the human subject.

TYPHUS IN MARYLEBONE.

AN outbreak of typhus fever, of exceptional gravity, has been exercising the minds of the authorities in the Marylebone district. To cope with this most dangerous epidemic the law has been strained to its utmost, and yet found wanting. It would be necessary to clear an entire group of houses, disinfecting not merely the rooms but the clothes worn by the inhabitants; and, as many have but the suit they stand in, this latter operation might be somewhat difficult. No less than ten houses in Charles-street, Lisson-grove, are officially reported to the vestry as unfit for habitation. The borough surveyor reports that four of these houses have from five to six feet of wet black soil under the basement floors. The footings of the walls do not reach any solid foundation, though they extend three to five feet below the floor level. There is no damp course, and the damp consequently invades not merely the basements, but the first floors also. These houses are let out in tenements, as many as five persons sometimes sleeping in one room, and there is a population of 423 persons in this street, though there are but thirty-three houses in all. Typhus fever first broke out in August last, and there have been thirty cases, of which fourteen were confined to four houses. An inquest has just been held on another case, the evidence given supplying sensational paragraphs to the daily papers. In a less crowded quarter, and if the houses were not in so dilapidated a condition, it would be possible to stamp the epidemic out. As it is, partial disinfection is ineffective; the entire premises have to be vacated, and then the question arises as to how far the inhabitants carry the disease away with them to their next habitation. In the present case we have to deal not merely with infected rooms and clothings; the very foundations of the houses are sunk in an accumulation of night soil which for years has been escaping from old and broken drains. The removal of this soil will be a dangerous and difficult operation, for it is probably at once the cause of the outbreak of typhus fever, and is also saturated with the evacuations of typhus patients. Fortunately the magistrate has granted the order to vacate the premises of four houses, pending proceedings, to be taken under Torrens' Act, for their total destruction. But this is all a very slow process. More than two months have elapsed since the fever first broke out, and the houses are still standing in their bed of sewage. Only two houses were vacated a short time ago, and the order to vacate two more has barely been issued. Thirty victims are, we fear, but the first fruits of these legal delays; and the question arises whether the medical officers should not be armed with powers to act more energetically and promptly in such cases. Before the present outbreak these houses had already been reported upon and an attempt made to have them repaired or destroyed. But this effort was defeated, for it proved almost impossible to discover the exact conditions of ownership, and there were signs of commencing repairs which provided

a good excuse for staying proceedings. Had the medical officer of health possessed sufficient powers, these houses would have been destroyed or rendered fit for habitation in the first instance, and the present outbreak of typhus prevented.

ROYAL COMMISSION ON THE MEDICAL ACTS.

LAST week we congratulated the public and the profession on the prompt resumption of its work by the Royal Commission on Medical Acts. We have now to express our satisfaction at the rate of progress. The Commission sat on the 18th of October, and four following days. There were present: the Earl of Camperdown (chairman); the Bishop of Peterborough; the Right Hon. W. H. F. Cogan; the Right Hon. G. Sclater-Booth, M.P.; Mr. Simon, C.B.; Professor Huxley; Dr. Robert M'Donnell; Professor Turner; and Mr. John White, secretary. The following witnesses were examined:—Dr. John K. Barton, R.C.S. (Ireland); Mr. Wm. Stokes of Dublin; Dr. J. Magee Finny, K. & Q.C.P.; Dr. John W. Moore, Irish Medical Association; Dr. B. W. Richardson, Medical Defence Association; Mr. Thomas Collins, Apothecaries' Hall, Ireland; Professor Struthers, Aberdeen University; Professor P. Redfern, Queen's University; Professor T. R. Fraser, Edinburgh University; Mr. John Tomes, British Dental Association; Mr. Thomas Edgelow, Association of Surgeons Practising Dental Surgery; Rev. Samuel Haughton, M.D., Dublin University; Professor Young, Glasgow University; and Dr. J. G. Greenwood, Victoria University. We miss the names of Sir William Jenner, Sir George Jessel, and other commissioners with regret; but we may hope that this is an accidental circumstance. The examination of fourteen witnesses in four days shows that the Commission is refreshed after its long rest; and the varied bodies represented by the different witnesses show, what has long been apparent, that the Commission is taking evidence from all quarters, and quite impartially, and from all parties—equally from those who are interested in the *status quo* and those who see the urgent necessity of reducing the competition of the bodies and increasing their independence and that of the General Medical Council.

SECONDARY CANCER OF THE STOMACH.

THE stomach is, as is well known, one of the organs in which primary cancer is most common. It was met with 399 times out of 889 cases of carcinoma collected by Marc d'Espine, and by Lange in 210 out of 587 cases. Thus, in 1476 cases of cancer, the primary growth was in the stomach in 41 per cent. On the other hand, secondary cancer is extremely rare in this situation. Four cases have, however, been recorded by Grawitz in the last number of Virchow's *Archiv*. In two of these the disease was secondary to cancer of the stomach; in the third the primary disease was in the testicle, and in the fourth case it was in the mamma. Adding to these cases four others, recorded by Cohnheim, one by Petri, and one by Weigert, he concludes that, of eight cases, the disease was secondary to cancer of the œsophagus in four, and in the others the primary disease was in the mamma (two cases), testicle, and leg respectively. The stomach in two cases contained only one growth, but in the remaining six it contained two or more tumours. All the layers of the wall of the stomach were involved in two cases, but in the rest only the mucous and submucous coats were affected. In four instances there was ulceration similar to that which occurs in primary cancer of the stomach, thus disproving an assertion of Förster that ulceration does not occur in secondary growths. In all eight cases the new formations were circumscribed, and not diffuse, a characteristic which may therefore, in doubtful cases, be of diagnostic importance.

EPIDEMIOLOGICAL SOCIETY.

THE first meeting of the Epidemiological Society for the present session is announced for Wednesday, November 2nd when Dr. Buchanan, the Medical Officer of the Local Government Board, who has been elected President in succession to Sir Joseph Fayrer, K.C.S.I., who retired from the chair at the close of the last session, will deliver an inaugural address on "Aids to Epidemiological Knowledge." A paper will also be read by Dr. S. C. Henderson, one of the honorary secretaries, on the "Progress of Zymotic Micro-pathology." The meeting, as will thus be seen, promises to be of exceptional interest, and augurs a continuance of that enlarged activity which characterised the meetings of the society under Sir Joseph Fayrer's presidency. The following is the list of officers and other members of the council for the session 1881–82:—President: George Buchanan, M.D., F.R.C.P. Honorary Vice-Presidents: The Earl of Shaftesbury, K.G., Right Hon. Lord Mount-Temple, Edwin Chadwick, Esq., C.B. Vice-Presidents: Dr. Gavin Milroy, Sir William Jenner, Bart., Dr. Henry W. Acland, Dr. J. W. Reid (Director-General Navy Medical Department), Dr. William Farr, Sir William Muir (Director-General Army Medical Department), Mr. John Simon, Sir Thomas Watson, Bart., Dr. B. W. Richardson, Inspector-General Robert Lawson, Sir William R. E. Smart, Mr. J. Netten Radcliffe, Dr. John Murray, Sir Joseph Fayrer. Treasurer: Dr. R. Thorne Thorne. General Secretaries: Mr. Shirley F. Murphy, Dr. G. C. Henderson. Secretary for Navy: Dr. Walter Dickson. Secretary for Army: Inspector-General Robert Lawson. Foreign and Colonial Secretaries: Germany and Russia, Dr. Collie; Sweden, Norway, and Denmark, Dr. Charles Fredk. Moore; Portugal and the Brazils, Dr. Donnett, R.N.; East Indies, Dr. John Murray; West Indies and South America, Dr. G. C. Henderson; China and Australia, Dr. Squire; Indian Ocean and East Africa, Dr. J. Christie; North America, Dr. Joseph Ewart. Other Members of Council: Drs. Robert Cory, W. H. Corfield, Edwin Haward, Sir A. D. Home, Norman Chevers, J. Burdon Sanderson, Hermann Weber, Surgeon-General C. A. Gordon.

CHOLERA AND FEVER IN INDIAN TOWNS.

NEWS of the fatal prevalence of "choleraic fever" in Umritsar, one of the largest cities in the Punjab, has recently been telegraphed from India. Surgeon-Major Bellew, the sanitary commissioner of the Punjab, has for some time issued weekly returns of mortality statistics relating to fifty-two of the principal towns of this province, having an aggregate population of more than a million and a quarter of persons. It is scarcely surprising, however, having regard to the difficulties of collecting the local information, that these returns are not published at the central office at Lahore until nearly a month after the close of the week to which they relate. The last two of these returns that have reached our hands relate to the two weeks ending 20th and 27th August, and bear date at Lahore on the 14th and 15th September. In those returns Umritsar is credited with a population of 136,166 persons, the only city in the list showing a larger population being Delhi, which, with its suburbs, is credited with 160,553 inhabitants. The annual death-rate in Umritsar in these two weeks ending 20th and 27th August is given as 53 and 66 per 1000 respectively; and the deaths from cholera and fever, which were 5 and 55 respectively in the first of these two weeks, rose to 17 and 72 in the second. It may be fairly assumed, therefore, that the intelligence of the terrible fatality of "choleraic fever" in this city, recently received, signifies the further increase of mortality from cholera and fever which commenced in the latter end of August. It is stated that business is at a standstill, and that nine-tenths of the

shops are closed, and in appearance the place is described as a city of the dead. We are told that no single European has escaped an attack, and that the railway, post, and telegraph offices are being worked under great difficulties, owing to the general sickness. Judged by these two weekly returns, the fatality of cholera in the Punjab was rapidly increasing at the end of August, the deaths from this cause in the fifty-two largest towns of the province being respectively 430 and 536. The disease was then most fatally prevalent in Jullundur and Lahore, in which cities the annual death-rate from all causes was equal to 296 and 224 per 1000 respectively during the fortnight now under notice. It would be interesting to know more of the sanitary condition of a city like Lahore, which appears to be the centre of the sanitary administration of the Punjab. The terrible fatality of cholera and fever indicates a health condition which can scarcely be said to be representative of successful sanitation.

"OLD MEN AND COLD WEATHER."

UNDER this heading attention has been drawn to the defective arrangements for heating and ventilating certain of the wards of workhouses, particularly those used by old men. Two of the guardians present at a recent meeting of the Chelsea Board declared that they went round "the very day" which was made the occasion of complaint—namely, the 5th of October, and "a slight draught was noticeable in the corridor." What may have seemed a "slight draught" to strong, well-fed, and well-clothed men, doubtless wearing their hats and probably overcoats, is not unlikely to have been much more to the poor aged folk in the workhouse. It is by no means reassuring to those who know how official visiting is conducted to be told that everything is as it should be, or nearly so. We would far rather take the testimony of the paupers themselves than that of any member of the Board of Guardians as to the fact of cold. Coldness, as a subjective feeling, implies either nervous depression or loss of animal heat; it may sometimes be difficult, in any special case, to determine which of these two modes of production has given rise to the result, but the remedy is the same under either condition. There ought certainly to be a fire to gladden the sight as well as to warm the bodies of the aged poor. A room without a fire is comfortless, and although the "able-bodied" paupers in a workhouse may be denied comforts, it is intolerable, and not to be permitted, if public opinion has any weight, that the old people in any Poor-law establishment should be similarly treated. There is a sort of inhumanity which consists in doing things unkindly. This inhumanity is a too common characteristic of pauper relief, and, unfortunately, persons who are not themselves inhuman seem to the manner born when once they become guardians—that is, guardians of the poor-rates rather than guardians of the poor.

ALLEGED INATTENTION TO AN IN-PATIENT.

ON Tuesday last, the 25th inst., an inquest was held at King's College Hospital on an in-patient, named Mary Ann Southgate, aged twenty-eight years, who had been in the hospital about a month, suffering from neuralgia and general ill-health. The patient died suddenly on the 22nd during an apparent sleep, and the husband asked for an inquiry into her medical treatment, and suggested that the nurses had not paid proper attention to the deceased. A post-mortem examination by Mr. Samuel Mills, of Southampton-street, who is in no way connected with the hospital, showed that the cause of death was a large tumour at the base of the brain, accompanied with considerable effusion of serum into the ventricles. It is well known that such cases often give rise to no special diagnostic symptoms and occasionally end suddenly, as in the present instance. The grief of the husband at his wife's unexpected death is very intelligible, but affords no excuse for imputations on the medical treatment, or of want of care and attention on the part of the nurses or medical staff, and we regret very much that such should have been made on this occasion. Complaints with regard to doctors and nurses are now made with far too little reason, and we are glad that this inquiry has shown that there was no excuse whatever for them in this instance. Dr. Johnson made a timely and energetic protest against such imputations being brought forward without any adequate grounds, and his testimony to the skill and kindness of hospital residents, nurses and sisters, is most opportune at the present time, when charges are brought against a most valuable and deserving body on the slightest and most frivolous pretexts. We could wish that the public knew more of the kindness and devotion with which the resident staff—medical and nursing—carry out their arduous duties to the sick patients under their charge.

TRANSACTIONS OF THE INTERNATIONAL MEDICAL CONGRESS.

IT is announced that the three volumes of the Transactions of the International Medical Congress will be published and ready for distribution at the beginning of December. To non-members the price of the work will be 30s., and the volumes can each be bought separately. The first volume will contain the list of members, accounts of the general meetings, the general addresses, the description of the specimens exhibited in the museum, and the transactions of the sections of anatomy, physiology, pathology, and materia medica and pharmacology. Volume II. will contain the transactions of the sections of medicine, surgery, State medicine, military medicine and surgery, obstetric medicine and surgery, and diseases of children. Volume III. will contain similarly the transactions of the sections of ophthalmology, mental diseases, diseases of the skin, diseases of the throat, diseases of the ear, and diseases of the teeth. Orders for the work will be received by J. W. Kolckmann, of Langham-place.

CONTAGIOUS PYÆMIA OF RABBITS.

IN some experiments on the inoculation of rabbits with the blood of animals dying from splenic fever Professor Semmer of Dorpat has found that a disease is produced which is not anthrax nor ordinary septicæmia, but a form of pyæmia which he believes to be new and specific. The animal inoculated with the blood of splenic fever died in two days with abscesses over the glutei at the place of inoculation, and ecchymosis and infarcts in internal organs. The blood was not decomposed, but presented an excess of white corpuscles, while the red corpuscles were beset with micrococci, which were found also in the serum of the blood and in the pus of the abscesses. A second rabbit, inoculated from the first, died in six days with very similar appearances, and micrococci were found also in the cells of the liver and in the tubules of the kidney. White points were also found in the liver, due to the accumulation there of colourless corpuscles. A long series of inoculations gave very similar results. An inoculated dog died on the third day with purulent conjunctivitis and a low form of pneumonia. The liver and kidneys were yellowish-brown, the liver cells granular. In the renal tubules there were detritus and fat-granules, and colourless blood-corpuscles in the glomeruli. At the place of inoculation pus had formed which contained the same micrococci. Control experiments with ordinary pus yielded a negative result. The distinction of the pathological condition from ordinary contagious septicæmia is in the absence of any destruction of the blood-corpuscles, the absence of transudation and inhibition, and of any rapid

decomposition after death. The small micrococci appear to be the agents of its production. In many cases there is no evidence of metastasis and infarction, which do not therefore appear to be an essential part of the morbid process.

THE BOROUGH HOSPITAL, BIRKENHEAD.

ON Wednesday, the 19th inst., the Governors and friends of the above hospital attended at that institution by invitation of the Mayor and Mayoress (Mr. and Mrs. Wm. Laird) to witness the formal handing over to the executive committee of the extension recently made to the building at the sole cost of his worship. About two hundred ladies and gentlemen were present. The hospital as originally planned consisted of four wards, with accommodation for thirteen beds in each, but only three of these wards have hitherto been in use. The increasing demands on the institution having rendered necessary the opening of the fourth ward, it was found imperative to provide additional rooms for the administrative staff, and upon the occasion of the meeting of the subscribers last Christmas the matter was considered, and Mr. Wm. Laird kindly offered to bear the expense of the alterations. These are now completed. A second storey, containing four bedrooms, has been added to the central building; and in the rear an annexe has been erected, mainly for the purpose of providing a new operating-room, with a waiting-room, store-room, and lavatories beneath. The cost of the alterations effected amounted to £1000. The hospital, which was built about twenty years ago, was the gift of the late Mr. John Laird, M.P., to the town, the architect being Mr. Walter Scott. The present alterations have been carried out from the plans and under the superintendence of Messrs. Aldridge and Deacon, successors to Mr. Scott. The company was conducted through the wards and new extension; and after tea and coffee had been served, Mr. Alderman Williamson (Chairman of the House Committee) in a brief speech reviewed the circumstances under which the increased accommodation had become necessary, and in the name of the Board of Management and the subscribers tendered his hearty thanks to the Mayor for his generous gift.

A MEDICAL LAND-LEAGUER.

DR. KENNY has been arrested, and incarcerated in Kilmainham gaol. We trust that there is no foundation for the belief that this gentleman has been imprisoned for using his professional calling as a cloak for practices which are clearly illegal—namely, conveying communications between the Committee of the Land League and the "suspects" in gaol, and even obtaining signatures to the manifesto recently issued in the name of the leader of the Land League in Kilmainham gaol. Dr. Kenny is entitled to his opinion, and if he has simply been placed in confinement as a supporter of the Land League, we have nothing to say on the subject. If, however, Dr. Kenny has made his visit as a physician serve a political purpose, it will be impossible to avoid the feeling, that he has cast some discredit on the profession by abusing its sacred privileges.

THE STATE MAINTENANCE OF LUNATICS.

WE are glad to find that the proposal to provide for the maintenance of lunatics out of imperial funds instead of local rates and taxes is again receiving attention. It is not unnatural that the authorities of counties and unions should desire to retain the management of the spending establishments located in their midst; but it would surely be practicable to combine the advantages of "local control" with the obvious benefits of a central fund. As it is, local interests, and even sentimental considerations arising out of the views and feelings of the magnates of a district, exert a powerful and damaging influence on policy. Asylums are built, or their erection refused, on grounds which are purely local, and often will not bear scrutiny. The provision which society is compelled to make for the care and cure of the insane ought to be uniform in its conception and thoroughly impartial in its administration. Insanity is a great evil, and entails a heavy burden, for the remedy and relief of which measures are required which cannot be carried into effect until the cost of maintaining and treating lunatics is defrayed by the State. This is a question in which a considerable section of the profession has an immediate interest. No efficient system of superannuation for asylum medical officers can be established until all the institutions of the country are placed under one head.

THE LONDON SANITARY PROTECTION ASSOCIATION.

PROFESSOR HUXLEY, as President of the London Sanitary Protection Association, occupied the chair at the first general meeting of the Association, and, with his usual happy phraseology, described the Association "as a co-operative store for the supply of good advice." He was less happy in his description of the objects of the Association, and of the position it holds in the sanitary advancement of the public; and an obvious lapse of memory was evident when he remarked that "disagreeable as the old cesspool system was, it was attended with very little danger compared with that which waited upon the water-carriage system if that system was imperfect." When, moreover, he stated that there were two ways of meeting the dangers which the Association sought to cope with—namely, one by the action of the Government, the other by promoting an intelligent knowledge of the evils to be removed, it was insufficient to point out that Governmental action was impracticable, as involving an intrusion in the affairs of private life which would be intolerable, and, moreover, on account of the expense. By recent statutes communities have, or may have, large powers of providing for themselves all essential sanitary requisites. The extent to which such provision has been made must depend on the level of intelligence in sanitary matters to which the community has reached. This as yet falls far short of the level which the Legislature contemplated, and in proportion as associations such as the Protection Association cultivates a higher knowledge and better appreciation of sanitary matters as relates to dwellings among individual householders, in proportion they will reach a matter which is beyond the power of the Legislature, and develop that knowledge among the masses which must underlie all sound local self-government, and upon which the efficiency of sanitary legislation depends.

CHILDREN IN PRISON.

THE vehement remonstrances recently addressed to the Home Secretary on the occasion of some remarkable applications of Justices' justice to juvenile offenders have not been without effect. Sir William Harcourt has happily seen fit to bring his influence to bear in such a fashion that the number of children in prison has been greatly reduced. This is as it should be. Public opinion is seldom wholly wrong, and it was certainly right in protesting against the abuse of power which took the form of sending very young persons to gaol for very small crimes. It is a notorious fact in our national experience, borne out by the corroborative testimony of the reformers of other countries, that nothing so much tends to the progressive demoralisation of a people as to multiply laws which are likely to be broken, or to punish indiscriminately for trivial offences. It is easy to make a special class of criminals in any community, and in a few generations the progeny of these manufactured offenders will

be physically likely to become law-breakers. It is a well recognised fact that crime—or rather the liability to commit crime—has a very strong tendency to become hereditary. There is nothing wonderful in this. It is the necessary consequence of the law governing development. Pauperism and crime are as truly transmitted in the process of organic reproduction as are any other qualities of blood and nature. It is therefore satisfactory to find that the practice of sending young children to prison and branding them for life as offenders is to be discouraged. Setting aside the question of humanity to the individual, the change of method is expedient in the interests of the race.

MORTALITY FROM SNAKES AND TIGERS IN INDIA.

IT may well be startling to Europeans to learn that no fewer than 21,990 persons were killed in India during the year 1880 by snakes and tigers. It is, too, at first sight eminently unsatisfactory to hear that this loss of life, instead of decreasing with the advance of civilisation, has actually increased during the past five years; the number of victims in 1876 did not exceed 19,273. This statement appears almost incredible, and requires explanation, which will probably be found in the greater accuracy with which causes of death have been returned in India in recent years. The largest fatality from snakes and wild beasts occurs in the Bengal Presidency, where during last year 10,064 persons are said to have died from snake-bites, and 359 to have been killed by tigers. It appears from the weekly returns issued by the Sanitary Commissioner of the Punjab that during the fortnight ending August 27th last no fewer than 113 deaths resulted from snake-bites in fifty-two of the largest cities of that province—equal to nearly 3000 per annum. As the fatality from this cause is probably larger in the rural than in the town districts, it is evident that the province of the Punjab must be responsible for a very large proportion of the excessive fatality from this cause in the Bengal Presidency.

AN UNSATISFACTORY INQUEST.

THE papers report an inquest by Mr. George Collier on the body of Walter John Allen, aged eleven, a poor little boy who up to the day of his death enjoyed the best of health. After eating some sweets and apple tarts he was attacked with pains in the stomach, and died before a doctor could be fetched. His life was insured in the Prudential office. Mr. Giles Ford said at the inquest that he made a post-mortem examination and found nothing to account for death but intense congestion of the small intestine, which contained a dark coloured fluid. The stomach was slightly congested, and contained almost two teaspoonfuls of a "muddy fluid." This was not preserved, as the stomach bore no traces of irritant poisoning. He considered death caused by inflammation of the intestine, and a corresponding verdict was returned. We cannot consider this inquest a success. It is very much to be regretted that the fluids of the stomach and intestine were not preserved by Mr. Ford for careful chemical examination. It is by such inquests that the coroner's court is brought into disrespect.

THE committee appointed by the British Medical Association to initiate and carry out the work of collective investigation announce through our advertising columns that they are about to nominate a secretary, whose salary is to be £200 a year, with allowance for travelling expenses. Members of the profession desirous of holding the office are requested to communicate with the General Secretary to the Association before Nov. 20th.

HIS Grace the Duke of Westminster, K.G., has endowed a scholarship of the value of twenty guineas, to be competed for by students of the Westminster Hospital Medical School at the end of their second winter session, in the subjects of anatomy, physiology, and histology. This scholarship will for the future be known as "The President's Prize."

IT is expected that Surgeon-General Crawford will leave India about the end of the year on his return to England to replace Sir W. Muir as Director-General. He will be succeeded as Principal Medical Officer in India by Sir A. D. Home, K.C.B., V.C., who will be the Senior Surgeon-General in India after Dr. Crawford's departure.

IT is rumoured that Sir Wyville Thomson, Professor of Natural History in Edinburgh University, contemplates the resignation of his chair, owing to failing health.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

West Sussex.—Dr. Charles Kelly reports for the combined sanitary district of West Sussex, during 1880, among a population estimated at 84,146, a birth-rate of 30·3, and a death-rate of 149 per 1000 persons living. The report, as usual, gives an admirable account of the sanitary condition of each of the several sanitary districts which enter into the combination. The chief value of the report, indeed, consists in the clear account it presents of the general health condition of the large tract of country included in the combination, and as such it deserves attentive study by medical officers of health, and should be of peculiar interest to the inhabitants of the combined district. The subject of principal importance to the outer world is the account given by Dr. Kelly of the prevalence of typhoid fever in the urban sanitary district of Worthing. This prevalence manifested itself in two outbreaks—one, owing, as Dr. Kelly showed, to defective drains and to the flooding of houses with sewer air at a time when part of the sewers of the town were choked by a heavy rainfall and blocked by the tide; the other owing to a polluted milk supply. We had occasion to comment on Dr. Kelly's report on these outbreaks when it was first published in the local journals, and need not recur in any detail to the subject now. Dr. Kelly reproduces his special report, with a useful illustration, in his present annual report. The following suggestive fact from the portion of the annual report on Petworth deserves quotation. The town of Petworth has been under the necessity of completing a system of drainage before providing a proper system of water-supply, Dr. Kelly's advice on the subject having been thus unhappily reversed. The result is stated by Dr. Kelly in the following words:—"The town is now in the very unsatisfactory position of having completed a system of drainage which is of no use because there is now no means whereby the drains can be effectually flushed."

St. Giles's District (Metropolis).—Mr. S. R. Lovett reports for the year 1880, in a population enumerated in 1871 at 53,429, a birth-rate of 28·0, and a death-rate of 20·8 per 1000 persons living. He further states that during the decennial period, 1871-80, the average mortality of the district had been nearly 5·0 lower than during the preceding decennial period, 1861-70. "This," he adds, "is strong evidence that the sanitary improvements ordered by your Board have produced beneficial results." The district suffered very little from small-pox and typhoid fever during the year, and typhus, which had prevailed to a certain extent in the previous year, was entirely absent. Scarlet fever and whooping-cough were the most prevalent of the principal zymotic diseases. Mr. Lovett has some observations on the difficulties which metropolitan districts like those of St. Giles will be placed in as to hospital accommodation for infectious diseases, if the

opposition against the metropolitan asylums district hospitals is carried out successfully. A suggestion made to the District Board to provide its own hospital accommodation he looks upon as visionary. If infectious disease hospitals will not be tolerated in comparatively sparsely populated suburbs, what likelihood is there that they would be tolerated in densely populated districts such as the St. Giles' district?

Greenock.—Dr. Wallace reports, for the five weeks ending September 3rd, a mortality at the rate of 18·9 per 1000 population. No case of death from typhus in the town was reported; but an increased prevalence of enteric fever and scarlet fever gives rise to some anxiety.

Dublin.—During September the deaths within the municipal area were 509, being in the annual ratio of 21·24 per 1000 of the population. The deaths from zymotic diseases amounted to 66, the mortality from this class of diseases during last month, and the month of June, being the lowest recorded, allowance being made for the increased accuracy in registration which recent legislation has effected. With the corresponding September of 1880, last month compares very satisfactorily. The death-rate from all causes in September, 1880, was 38·50 per 1000, as compared with 21·24; and the rate from the seven principal contagious diseases 11·87, against 1·96. Dr. Cameron, the superintendent medical officer of health, justly considers that this improvement in the state of public health in Dublin is in some measure due to the important sanitary works carried out in the city during the last few years. It is, however, as he observes, necessary that the improved cleansing and paving of the city, the shutting up of hundreds of old tenemental dwellings, and the more general use of water-closets in the tenemental dwellings, should be followed up by the erection of a large number of dwellings for the most humble and the most dependent classes of the population. There is a great dearth of house accommodation for these classes, owing to the closing of 841 houses and hundreds of single rooms and cellar dwellings since August, 1879.

SANITARY HOSPITALS AND HONORARY MEDICAL STAFFS.

Recent occurrences in Sheffield have raised the question (not for the first time) whether it is proper or just to the medical profession to appoint an honorary medical staff to a sanitary, otherwise a rate-paid, hospital. What claim upon the services of a medical man a hospital can have which is in no sense a charity, and not intended to receive patients as objects of charity, is not explained, and, indeed, not attempted to be explained. The question, as it has come before us, does not in reality involve any recondite matter of ethics, professional or otherwise, or of morality. It simply relates to the cheapening of local sanitary administration at the expense of the medical profession. If the medical profession be induced to look upon rate-paid hospitals in the same sense as hospitals supported by voluntary contributions, it might be possible to induce them to undertake the charge of these hospitals free of cost. We trust that the profession is sufficiently cautious to escape falling into this very obvious trap. We are not called upon to assist local authorities in performing a duty for which they are paid, for which they are authorised to pay, and into which no element of charity enters.

THE METROPOLITAN LOCAL AUTHORITIES AND THE WATER-SUPPLY.

A meeting of delegates from the District Boards and Vestries of Islington, Kensington, Limehouse, Wandsworth, Mile end, Clerkenwell, Fulham, &c., took place in the vestry-hall of St. Martin's, on the 26th inst., to consider the question of the water-supply of the metropolis. Mr. E. J. Watherstone occupied the chair, and explained that the meeting had been called to urge the Government to take steps to deal with the water question next session. He described the way in which delay in settling this matter was telling to the large advantage of the Water Companies and to the disadvantage of the consumers, and generally complicating the whole question. In the end the meeting determined to address a memorial to the Prime Minister, representing the increasing charges which the ratepayers of the metropolis had to pay to the Water Companies without obtaining any equivalent in the shape of purer or more copious supply, and urging the Government to legislate on the subject next session on the lines of the report of the Select Committee of last year.

INQUIRY AS TO VACCINATION.

The Epidemiological Society of London has appointed a special committee, consisting of Dr. Robert Cory, Dr. John M'Combie, and Mr. Shirley Murphy, to ascertain the evidence which the present state of medical knowledge supplies as to the conditions affecting the protection against small-pox afforded by vaccination. To effect this purpose the committee have issued a circular of questions for distribution among men calculated to elicit the information the society seeks for. A report of an inquiry by a committee of this society, made and published in 1853, and which was presented to and ordered to be printed by Parliament, exercised an important influence on subsequent legislation as to vaccination in this country. The late Dr. E. C. Seaton acted as the honorary secretary to this committee. Renewed activity of the society in this direction will be welcomed by all who take an interest in the subject. The circular is signed by Sir Joseph Fayrer, and it must be regarded as one of his last official acts before vacating the presidential chair.

The Llandovery Board of Guardians has recently come to a decision which may well form a precedent for other boards under similar circumstances. Mr. Lewis, medical officer of the union, presented an account for extra services in an urgent case, where an order for medical relief could not be obtained at the moment when such relief required to be administered. In this case the guardians were not, of course, legally bound to admit the medical officer's claim, but to obviate the hardship which would sometimes be inflicted on the poor by a rigid adherence to the rule, the board, after allowing the bill, resolved that the medical officer should, as soon as possible after attending any case on his own responsibility, inform the relieving officer, who should then at once institute inquiries, and be able to report at the next meeting.

The nervous system of residents in Fulham must have undergone a more serious shock from the contiguity of the Fulham Small-pox Hospital than had at first been anticipated. It has been suggested that the disinfecting cart of the district should not be allowed to move through the streets except between the hours of 7 P.M. and 8 A.M. This suggestion should surely have been supplemented by another suggestion forbidding medical men moving about the streets except within the same hours.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

Under the influence of the recent unseasonably low temperature the rate of mortality showed a further increase last week. During the week ending last Saturday 5518 births and 3097 deaths were registered in the twenty large English towns dealt with in the Registrar-General's weekly return. The annual death-rate in these towns, which had been equal to 17·9, 18·8, and 20·5 in the three preceding weeks, further rose to 21·2 last week. The lowest rates in these towns were 15·6 in Bristol, 16·0 in Norwich, and 16·2 in Birmingham; the rates in the other towns ranged upwards to 25·1 in Oldham, 28·2 in Salford, 28·9 in Liverpool, and 29·9 in Hull. The deaths referred to the principal zymotic diseases in these twenty towns were 477, and 24 less than the number returned in the previous week; they included 138 from scarlet fever, 102 from "fever" (principally enteric), 74 from measles, 61 from whooping-cough, 57 from diarrhœa, 31 from diphtheria, and 14 from small-pox. The annual death-rate from these zymotic diseases averaged 3·3 per 1000 in the twenty towns, and ranged from 0·3 and 0·6 in Leeds and Norwich, to 6·3 and 12·8 in Liverpool and Hull. Scarlet fever is still the most fatal zymotic disease in these towns, and showed the largest proportional fatality last week in Hull, Nottingham, Sunderland, and Leicester; 32 more fatal cases were recorded in Hull, no fewer than 318 having been recorded within that borough since the end of June last. The 31 deaths from diphtheria in the twenty towns included 21 in London, 5 in Liverpool, and 4 in Portsmouth. The deaths referred to "fever" showed a further general increase, and were proportionally most numerous in Brighton, Hull, London, and Salford. Small-pox caused 16 more deaths in London and its suburban districts, whereas no fatal case was recorded in any of the large provincial towns. The number of small-pox

patients in the metropolitan asylum hospitals, which had been 422 and 443 on the two previous Saturdays, further rose to 455 at the end of last week, including 140 in the *Atlas* hospital ship, and 63 in the Convalescent Hospital at Darenth. The new cases of small-pox admitted to these hospitals, which had been but 51 and 62 in the two preceding weeks, rose again to 106 last week. The deaths referred to diseases of the respiratory organs in London, which had steadily increased in the seven preceding weeks from 115 to 279, further rose last week to 319, and exceeded the corrected weekly average by 17; 182 resulted from bronchitis and 77 from pneumonia. The causes of 82, or 2·6 per cent., of the deaths in the twenty towns last week were not certified either by a registered medical practitioner or by a coroner. The proportion of uncertified deaths, which did not exceed 1·4 per cent. in London, averaged 4·0 per cent. in the nineteen provincial towns. All the causes of death were duly certified in Plymouth, Leicester, and Sunderland, whereas the proportions of uncertified deaths were largest in Salford, Bradford, and Leeds.

HEALTH OF SCOTCH TOWNS.

The annual death-rate in eight of the largest Scotch towns, which had been equal to 18·4 and 21·4 in the two preceding weeks, was again 21·4 last week, and was almost identical with the average rate in the twenty large English towns. The deaths referred to the principal zymotic diseases in these Scotch towns, which had been 71 and 108 in the two previous weeks, declined again to 79 last week; of these, 25 resulted from diarrhœa, 15 from scarlet fever, 13 from diphtheria, 12 from whooping-cough, 8 from measles, 6 from "fever," and not one from small-pox. The fatal cases of diarrhœa, although showing a decline from the number in the previous weeks, were proportionally more numerous than those returned in the English towns. The death-rate from "fever," on the other hand, was little more than half that which prevailed in the English towns. Both diphtheria and measles showed the greatest fatality in Glasgow, while the deaths from scarlet fever were most numerous in Edinburgh. The deaths attributed to acute diseases of the lungs (bronchitis, pneumonia, and pleurisy), which had been 96 and 108 in the two previous weeks, were 103 last week, and equal to an annual rate of 4·5 per 1000, against 3·9 from the same causes in London.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 18·7 and 18·2 per 1000 in the two preceding weeks, rose to 21·9 last week. During the first three weeks of the current quarter the death-rate in the city has averaged 19·6, against 20·0 in London and 20·6 in Edinburgh. The 147 deaths in the city showed an increase of 25 from the low number in the previous week, and included 12 which were referred to the principal zymotic diseases, of which 4 resulted from scarlet fever, 3 from measles, 2 from diphtheria, 2 from diarrhœa, and one from "fever"; no fatal case of whooping-cough or small-pox was registered. The annual death-rate from these zymotic diseases was equal to 1·8 per 1000, while the rate from the same causes was 3·2 in London and 2·5 in Edinburgh. The fatal cases of scarlet fever, measles, and diphtheria exceeded the numbers in recent weeks; while those of diarrhœa and "fever" showed a marked decline. The deaths, both of infants and elderly persons, considerably exceeded those recently returned.

HEALTH MATTERS GENERALLY AT HOME AND ABROAD.

THE SANITARY ASSURANCE ASSOCIATION.

At the ordinary meeting of the Council of this Association, held at the offices, 5, Argyll-place, Regent-street (Oct. 26th), Professor Hayter Lewis, F.S.A., in the chair, certificates were issued to those subscribers who had carried out the recommendations of the association with regard to the sanitary arrangements of their houses. The certificates are signed by the chief sanitary officer of the association, Professor Corfield, M.D., and the surveyor, Mr. Mark H. Judge, and they guarantee the satisfactory condition of the houses to which they refer, the inspection, report, and supervision of the work where alterations are necessary being made personally by both officers. The certificates are issued subject to an annual inspection of the property, for which the members are charged a small fee, according to the rateable value of the houses; for instance, for a house rated at £80 the fee is half a guinea for each annual inspection, while for a house rated at £200 the fee is two guineas. The work of the association is very simple in plan. Application is made for the inspection of a house, and the inspection is conducted personally by both the chief sanitary officer and the surveyor, who supply a detailed report on the sanitary condition of the property, together with a specification of the work necessary to put it into a condition satisfactory to the association. While this work is in progress it is supervised by these officers, and on its completion the council grant a certificate.

THE LONDON WATER-SUPPLY.

Messrs. Crookes, Odling, and Meymott Tidy, in their report on the water supplied to London during the month of September, say that: "Altogether the water supplied by the companies continues of excellent quality, though no longer presenting that exceptional freedom from other than blue colour by which it was characterised during the summer months." Dr. Frankland's report, attached to Colonel Bolton's (the water examiner's) report, may be read pretty much in the same sense, although we would not venture to say so absolutely, having regard to the very different conditions under which the examinations of the water are pursued. Colonel Bolton states that the water in the Thames at Hampton, Moulsey, and Sunbury (where the intakes of the West Middlesex, Grand Junction, Southwark and Vauxhall, Lambeth, Chelsea, and East London Companies are situated) was good in quality during the whole month of September with the exception of two days, the 27th and 28th, when it became indifferent. The water in the river Lea was good during the month.

"LEICESTER PIES."

From time to time the metropolitan and general public have been painfully, not to say revoltingly, enlightened as to the subject of "Leicester Pies." But it would appear from a case recently heard in the Leicester Borough Police-court, that there is still a demand for these savoury articles of diet, notwithstanding the light which has occasionally been thrown upon their too fragrant composition. The meat inspector for the borough had seized no less than 2 tons 5 cwt. of pork, and 600 lb of beef unfit for human food upon the premises of one of the wholesale pie manufacturers, part of the seizure having been already minced, spiced, and seasoned preparatory to being converted into pies and sausages. The medical officer of health gave evidence as to the unfitness for food of the material in question, and the proprietor of the premises upon which the meat was seized was sentenced to two months' imprisonment without the alternative of a fine. He, however, intends to appeal against the sentence.

The Governor of Bombay has telegraphed to Lord Dufferin that cholera has ceased in Surat. The removal of the ten days' quarantine at Bussorah is requested. At Aden also the epidemic appears to have subsided.

Dr. Iliff recently directed the attention of the Newington Vestry to a series of cases in which the Lambeth Water Company had cut off the water-supply of families in the most inconsiderate and cruel manner. The vestry have taken up the question, and the Company, through its secretary, have promised to act less arbitrarily in the question of cutting off a water-supply.

COLLEGE OF PHYSICIANS IN IRELAND.—On St. Luke's Day, the 18th inst., the following officers were elected for the ensuing year:—President: George Johnston. Vice-President: John W. Moore. Censors: R. J. Harvey, Arthur V. Macan, John W. Moore, C. J. Nixon. Additional Examiners: A. Foot (Forensic Medicine), Fleetwood Churchill (Midwifery), J. H. Benson (Medicine), W. G. Smith (Chemistry), G. F. Duffey (Materia Medica), J. Purser (Physiology), C. J. Nixon (Anatomy). Registrar: J. Magee Finny. Treasurer: Aquilla Smith. Examiners in Midwifery: Fleetwood Churchill, John R. Kirkpatrick. Professor of Medical Jurisprudence: Robert Travers. Representative on the General Medical Council: Aquilla Smith.

ROYAL COLLEGE OF PHYSICIANS.

AT a Comitia of the College, held on Thursday last, under the presidency of Sir W. Jenner, Bart., after the admission of members and licentiates, a change in the by-laws, allowing of an increase in the number of examiners from twelve to twenty-eight, was adopted; and the treasurer's annual report was presented by Dr. Farre. It was resolved that a conversazione be held at the College in June, 1882. Dr. Wilks gave notice that at the next meeting he would move a resolution bearing on the regulation respecting the conduct of fellows, members, and licentiates of the College.

THE NEW ENTRIES.

WE publish this week a fuller and more complete list of the new entries at the London and Provincial Medical Schools:

	Total.	Full.	Partial.
St. Bartholomew's	166	160	6
University College	147	106	41
London	124	74	50
St. Thomas's	94	65	29
Guy's	84	—	—
St. George's	66	—	—
Middlesex	54	33	21
King's College	58	—	—
Charing-cross	44	38	6
St. Mary's	21	—	—
Westminster	20	—	—
Durham University	125	—	—
Owens College	86	80	6
Liverpool, Univ. Coll.	42	39	3
Cambridge	50 (?)	—	—
Leeds	27	—	—

Correspondence.

"Audi alteram partem."

ADDRESS ON SPECIALISM IN MEDICINE.

To the Editor of THE LANCET.

SIR,—My attention has been directed to a sentence at the end of my address on "Specialism in Medicine," delivered at University College, which runs as follows:—"There are many other points upon which I should have liked to speak to you of the specialisms that have so limited an area that it is quite impossible for any man, who is restricted to any one of them, to make an income, unless he does so by inducing his patients to pay him needless visits." I should rather have said, It is difficult for a man whose practice is restricted to any one of them to make a large income. Any careful reader will see that, while my remarks were directed against "specialism," no one values more highly than I do the advantages to our profession that have been derived from the honest work of "specialists." I need hardly add that my remarks were directed against the evils of "specialism," and not against individuals.

I am, Sir, yours obediently,
J. RUSSELL REYNOLDS.

Grosvenor-street, W., Oct. 26th, 1881.

ABUSE OF THE VAGINAL SPECULUM.

To the Editor of THE LANCET.

SIR,—A few days ago a gentleman in a highly respectable position in society in the north of England called on me for advice in the following peculiarly painful circumstances. He averred that through the use, or rather the abuse, of the vaginal speculum he had lost, as he feared for ever, the affection of his wife, who is, I may say, an amiable and accomplished lady. His case interested me so much that I asked his permission to publish it in THE LANCET. This he at once agreed to; not only so, but he wrote out a history of it himself, so that I shall for the most part allow him to tell his own story.

No instrument is of more importance to a medical practitioner than the vaginal speculum; still the facts narrated below must impress us with a grave sense of the responsibility which at all times rests upon us in the use of the instrument; and how, without any intention on our part, the peace, the happiness of a household, may be broken up for ever. But let the chief, not the only, "victim" speak:—

"I was married to a charming woman. Our happiness continued fifteen years. She became the mother of a family. Then some little ailment set in, which was described to me as a simple case of ulceration. The os uteri was touched with nitrate of silver very frequently during a period of three months, and then she was pronounced completely cured. For that three months I was strictly abstinent. She became warmly attached to her doctor, saying he had saved her life, though he generously enough admitted that it was only a common case, and that her life never was in danger. Then, as time wore on, there were more ulcerations, more examinations, and all the rest of it; accompanied by periods of abstention on my part, one of them lasting about nine months. During the period of this treatment I, in some unknown way, lost my wife's love. She seemed never happy unless when from home and seeking after advice, which she had from half a dozen doctors. I put my foot down at length on one of her proposed arrangements, and then for several years there was a vacuum, which was ultimately filled by another, and non-medical influence, that induced her to leave my roof, and resolve on final and permanent separation. Thus the social ruin of a large family—of daughters and sons—seems due to the use of the speculum, and the estrangement caused by the injunctions of 'ladies' doctors,' which, I am told, they never impose upon themselves."

Such is my patient's narrative. To all appearance the lady is in the best of health though professionally I have not seen her. What is my patient to do? For the sake of his family he is very unwilling to expose them in a law-court. He has tried to win back his own and her love and affection. He ascribes the origin of all his troubles, rightly or wrongly, to the speculum and abstentions. We know from experience that when the use of it, or the catheter, is continued for some time to nervous, hysterical ladies a morbid craving for its continued use is created; and therefore we cannot be too discreet in the use of these instruments.

My friend concludes his letter with some practical advice, under four heads, which are indicative of the points on which he makes complaint. To the credit of the profession, I think I may say, the great majority of medical men already act up to them:—

"The instrument may, or may not, be useful, for aught I know; but I maintain: (1) That when it is employed another lady ought to be in the room; (2) that its employment ought not to be continued against the doctor's own opinion merely to gratify a craving, or solicitude, for examinations, which its use has seemed to me to create on an apprehensive, highly-strung woman; (3) that doctors are not at liberty to augment their influence by creating the fear of insanity in such natures by expositions of a near connexion between uterine ulceration and the nervous system; and (4) that when a husband's abstinence is imposed its extent should be stated direct to himself, and not merely transmitted through the wife."

These suggestions, especially the first and fourth, will, I think, commend themselves to every member of the profession. By attention to them we avoid even the "appearance of evil."

Perhaps some of your numerous readers would give their advice in reference to the above case in its moral and social, as well as its professional, aspects; and especially as to right professional practice in cases where the speculum is used and abstinence imposed, with the risk, it would seem, of destroying conjugal affection.—Yours truly,

Oct. 3rd, 1881. M.D.

CHLOROFORM AS AN ANTISEPTIC.

To the Editor of THE LANCET.

SIR,—I can confirm Mr. Martindale's statement as to the value of chloroform as a preservative of solutions of vegetable matter, having so used it in my infusions for over two years, and I consider its presence to be much less objec-

tionable than the 25 per cent. of spirit of wine usually added to concentrated infusions and decoctions. In addition, I find it equally valuable as a preservative of animal fluids, and it is superior in this respect to either salicylic, boracic, or benzoic acids, as the following will show. I was recently requested by Dr. T. Barlow to conduct some experiments as to the best method of preserving fresh meat-juice, by the addition of a simple antiseptic, not unfitting it for internal use. In the first experiment the previously named acids and chloroform were added to the meat-juice in the same proportion, and exposed in open bottles under the same conditions. The acid solutions broke down in seven days, the chloroform in eleven. In a second experiment, one-quarter per cent. of chloroform was dissolved in meat-juice, and the bottle well corked. On opening in fourteen days, the meat-juice was apparently as fresh as ever, thus demonstrating that the breaking down in the first experiment was due to volatilisation of the chloroform. By this method of preservation meat-juice, a most valuable restorative, usually becoming putrid in twenty-four hours, can be kept fresh for a considerable time, and thus made more available as a therapeutic agent.

I am, Sir, yours truly,

A. W. GERRARD, F.C.S.,
Teacher of Pharmacy to University College Hospital.

Oct. 18th, 1881.

THE ST. JOHN AMBULANCE ASSOCIATION.

To the Editor of THE LANCET.

SIR,—Some of my medical brethren would much like to know what you and the profession generally think of the objects and aims of the St. John Ambulance Association, which, it appears, is now establishing centres of work in all our large towns. On looking over the prospectus one cannot help being struck with the almost entire absence of medical men in its list of patrons and supporters; and this is surely a remarkable fact and one which requires explanation. A great many branches are already in existence, but it is rare to find the names of more than one medical man on any of the committees. There are many points in the Society's programme which to my mind are highly objectionable, but I will defer mentioning them until I hear that you are willing to open your columns to a discussion of the subject.

I am, Sir, yours obediently,

Oct. 1881. A COUNTRY PRACTITIONER.

EDINBURGH.

(From our own Correspondent.)

THE medical classes, both in the University and Extra-Academical School, commenced on the 25th. The number of students is already large. In accordance with the usual custom, there was no formal "introductory" in the University. Many of the professors gave introductory addresses to their own classes. The departments of Practice of Medicine, Surgery, and Midwifery have been moved to the New University Buildings, near the Royal Infirmary. The change will be a pleasant one both for professors and students, as the overcrowding in some of the classes last winter seriously interfered both with comfort and work. In the new buildings each professor will have a separate lecture theatre, and ample accommodation in the way of retiring-rooms, museum space, and rooms for practical work. The lecture theatres are seated for about three hundred; nevertheless it is feared that the accommodation may be insufficient, the number of students having more than doubled since the original plans were passed. A gallery has been placed in the practice of medicine theatre. It increases the accommodation, but detracts, I think, from the beauty and comfort of the room. The stonework of the new buildings is of the most solid and handsome description; the woodwork and fittings of those departments which are completed seem all that could be desired. Special attention has been given to heating, lighting, and ventilation.

Professors Grainger Stewart, Spence, and Simpson all gave introductory lectures to crowded classes. The Principal of the University and the members of the Medical Faculty were present at Professor Grainger Stewart's lecture, which was the first of the session, the hour for practice of medicine having been changed from three to nine o'clock.

The chief event of the week has been Professor Greenfield's inaugural address. The induction of a new professor is always looked forward to with great interest. The address was delivered in the chemistry class room on Wednesday, at 2 P.M. Sir Robert Christison, Emeritus Professor Balfour, the members of the Medical Faculty, and many other University professors were present. The spacious lecture room was completely filled. Professor Greenfield was well received, and was frequently applauded during the delivery of his very able address, the subject of which was "Pathology, its Past, Present, and Future."

I hear with great regret that Professor Wyville Thomson is about to resign his chair, on account of continued ill-health. His loss will be a serious one to the University. It is earnestly to be hoped that rest from labour may in his case be attended with the same happy result as in the case of his distinguished predecessor.

The introductory address in the Extra-Academical School was delivered on Monday, the 24th, by Dr. A. G. Miller. The President of the Royal College of Surgeons was in the chair, and most of the lecturers in the Extra-Academical School were present. The subject was a somewhat unusual one for an introductory—viz., Intemperance and the Value of Medical Mission Work. In the course of his lecture, Dr. Miller announced the following additions to the staff of the extra-academical lecturers: Dr. Catheart, as successor to the late Dr. Handyside, lecturer on Anatomy; Dr. George A. Gibson on Medical Anatomy and Physical Diagnosis; Dr. John Robertson on Diseases of the Eye; and Dr. David James Hamilton on Pathology.

IRELAND.

(From our own Correspondent.)

AT the annual meeting of the College of Physicians, held last week, Dr. Aquilla Smith was re-elected representative on the General Medical Council, and Sir Edward Barrowes Sinclair Professor of Midwifery in the School of Physic, Trinity College. At the same meeting the honorary fellowship of the College was conferred on Professor Herman Ludwig Ferdinand Helmholtz, of Berlin.

At a meeting of the Dublin Town Council, held last Monday, the following presentments to charitable institutions were made:—Jervis-street, Meath, Mater Misericordiæ, Incurables, City of Dublin, St. Vincent's, Sir Patrick Dun's, Rotunda Lying-in, and Cork-street Hospitals, £300 each; to St. Mark's Ophthalmic Hospital, £150; Maternity Department of Sir Patrick Dun's Hospital, £50; Coombe Lying-in Hospital, £520; Dublin Orthopædic Hospital, Children's Hospital, National Eye and Ear Infirmary, and National Orthopædic Hospitals, £100 each. A sum of £10,322 15*s.* 6*d.* was also granted in support and maintenance of the Richmond District Lunatic Asylum from last April to March 31st, 1882.

Surgeon Butcher of Dublin met with a serious accident on Saturday last, in consequence of the cab in which he was riding coming into collision with a tram-car. Besides various external injuries, Mr. Butcher received a severe shock, but he is now progressing favourably towards recovery.

The Council of the Surgical Society of Ireland will be elected for the ensuing year on the first Monday in November. Those entitled to vote must not alone be members of the Society, but also either Fellows of the College of Surgeons or of the College of Physicians.

Mr. J. E. Kenny, one of the medical officers of the North Dublin Union, was arrested on Monday last as an accessory for intimidating in reference to the payment of rent, and conveyed to Kilmainham gaol.

Dr. Barry of Midleton has been appointed by a sealed order of the Local Government Board medical officer of Midleton No. 2 dispensary district.

PARIS.

(From our own Correspondent.)

M. MARTINEAU has published the result of a large number of cases of syphilis treated by a new method at the Hôpital Lourcine. The preparation employed consists of a mixture of powdered peptone, chloride of ammonium, and bichloride

of mercury, which are dissolved in water and glycerine. In order to have a standard solution which shall contain 5 centigrammes (·02 grain) in a gramme, the following proportions are taken: Powdered peptone (Catillon), 9 grammes; chloride of ammonium, 9 grammes; bichloride of mercury, 6 grammes. These are dissolved in glycerine, 72 grammes; water, 24 grammes. This solution, which the author calls "normal," further diluted with five parts of distilled water, is of such strength that an ordinary French hypodermic syringeful represents 10 milligrammes, or ⅛th of a grain of corrosive sublimate. The solution is injected subcutaneously, and the dose employed by M. Martineau has varied from 2 milligrammes (1/25 grain) to 10 (⅛ grain) of bichloride of mercury. Altogether 172 patients have been under observation, and a total number of 3838 hypodermic injections made. No abscesses or sloughs have ever followed the operation; sometimes a defective injection has given rise to a lump, but this has always rapidly disappeared. There is never either stomatitis or salivation, even with ¼th of a grain of the mercuric salt daily. It may here be noted parenthetically that the dose of bichloride of mercury prescribed to be taken by the mouth is much larger in France than in England, two-fifths of a grain daily not being considered excessive. The rapidity and certainty with which the symptoms disappear under this treatment are almost marvellous. Taking at random one of the cases reported (the 50th), forty injections in six weeks sufficed to cure a syphilis which had been rebellious to the usual mercurial course for eight months. This statement that the patient was cured is the more remarkable as it comes from a man who wrote not a year since that the minimum of mercurial treatment necessary to cure was four years and upwards.

An equally important contribution to the art of healing, in another special branch of medicine, was announced at a recent meeting of the Academy of Medicine. M. Giraud-Teulon has had occasion to deal with twenty-four cases of opacity of the vitreous humour within the last fourteen years, and all of these have been submitted to treatment by galvanic currents. Twenty-two have been notably modified, a marked clearing-up of the vitreous humour taking place. In most of these the sight was correspondingly benefited, although in some instances further and deeper mischief remained to prevent vision. Twice only was the constant current unable to clear up the opacity, but these were cases of neo-formations of syphilitic origin. M. Giraud-Teulon's high scientific position makes these statements of great importance.

VIENNA.

(From our own Correspondent.)

THE ardent desire of the Hungarians to have a third university in their country will at last be granted. His Majesty the King has lately sanctioned the project of the foundation of a new university at Pressburg, presented to him by the Minister of Instruction. The Pressburg University will prove a powerful rival of that existing in Vienna, as more than one-half of all students of medicine at the latter city are Hungarians. But where will the Hungarians obtain professors for the new university, the long-existing Transylvanian University of Klausenburg not being sufficiently provided with eminent teachers?

At the session of the Medical Association on October 14th under the presidency of Professor Arlt, Professor Dr. A. Schrötter, our famous laryngoscopist, made a speech in memory of the deceased member of the Association, Professor Joseph Skoda. This brilliant oration, recalling the merits of the illustrious founder of our school, produced a strong effect on the hearers. The whole of the assembly were habited in mourning, and the Session hall was adorned with a full-size bust of the late professor.

The "iodoform-bandage" becomes more and more used in our chirurgical practice. After an amputation or resection, the open wound is sprinkled over with iodoform powder, the wire sutures inserted, drainage employed when necessary, and the whole carefully wrapped in wadding and gutta-percha paper. The results of this proceeding are declared to be satisfactory. The representative of this method is Professor Mosetig, and Professor Billroth adopts this system in his clinic.

Professor Sigmund has revived the old and often broached question of a "reasonable treating of syphilis." The following are the propositions of this celebrated syphilographer. A general treatment should be employed only on the unmistakable appearance of general symptoms. Mercury is to be considered as a direct, iodide as an indirect, remedy against syphilis. Iodide does not destroy the germ of syphilis, but frees the lymph and the blood from the elements of rheumatic, arthritic dyscrasis, and from mercurial substances, thus calling forth the natural healing power of the organism. Bromide can only be considered as a great adjuvant. The same may be said of a great many other antisyphilitic remedies, the number of which has lately been increased by "pilocarpine."

Rinderpest rages in Low-Austria, in the villages situated not far from Vienna. Professor Klebs, the pathological anatomist, of Prague, in his latest publication, insists on the necessity of submitting all fattened beasts to a quarantine by "parking" the whole of the suspected cattle of a place. He only permits the slaughtering of a beast when it is proved to be affected by the contagion. Such affected animals should be submitted to scientific observation, which may result in the discovery of vaccine matter capable of preventing the plague.

It was not easy to find a man capable of occupying the chair of Pathological Anatomy at the Vienna University, in the absence of Professor Klebs. In the meantime, however, Dr. Chiari carries on the teaching of this branch; but Professor Klebs's friends still hope to see him shortly in Vienna. It is certain that no official proposition has been made to Cohnheim. Klebs's opponent is therefore not Cohnheim, but Professor Kundrat in Gratz—a name which, as a scientist, might be as unknown to you as it is to us.

The mode of treating various affections of the spinal marrow, as tabes dorsalis, multiplex sclerosis, neuritis centralis, &c., by "stretching the nerves," introduced in Germany by Langenbuch, who has published many cases, in which at least great improvement of the formerly hopeless state had been obtained by this proceeding, has been employed in Vienna by Professor Billroth, but the results being very unfavourable, the great operator and his assistants have resolved upon abandoning further attempts of this kind. The patients' wounds being healed, months elapsed without any improvement becoming evident, and many of them ultimately died. We are expecting a published account of this case, by Dr. K. Weiss and T. Mikulicz. Professor Maurice Benedikt, the nerval pathologist and electrician, whose fame has lately become "European" by the theories he has founded upon the examination of twelve brains of criminals, assuming for the nonce the surgeon's *rôle*, seized a scalpel and began operating and stretching. Three of the patients having undergone the operation are said to be dead. We are promised a report of these cases also. The last patient operated on died three days ago. Nevertheless Benedikt speaks and writes of "extraordinary results" obtained, of "regeneration of the marrow," reproduction of the central process, return of the mobility of pupils, &c. Benedikt's proceeding, however, smacks too strongly of effect-hunting to gain the approval of scientific observers in Germany.

Obituary.

ALFRED H. McCLINTOCK, M.D., LL.D., F.R.C.S.I., OF DUBLIN.

WITH sincere regret we chronicle the decease of a leading Dublin physician, Dr. McClintock, which sad event took place on last Friday, the 21st inst., at the age of sixty years. Dr. McClintock, a few weeks since, suffered from a cerebral attack, and as it was complicated with heart disease great anxiety was felt as to his recovery. In a short time, however, some of the graver symptoms disappeared, and the bulletins issued by his medical attendants were so encouraging that it was considered he was progressing most favourably. It was, therefore, with considerable surprise that the intelligence was received last week that the deceased had succumbed from heart disease. Dr. McClintock was a distinguished obstetric physician, an ex-Master of the Rotunda Lying-in Hospital, an ex-President of the Royal College of Surgeons in Ireland and of the Pathological Society of Dublin, and a honorary member of the Obstetrical Societies of London and Edinburgh. Of courteous bearing,

he was a good speaker, a trusted physician, a Christian gentleman, and deservedly held a high reputation in that branch of medical science to which he had more especially devoted himself. He edited Smellie's treatise on the Theory and Practice of Midwifery, published in the transactions of the Sydenham Society in 1876; was the author of "Clinical Memoirs on Diseases of Women," and contributed several papers on obstetric subjects to the medical periodical press. At the recent meeting of the International Medical Congress, as President of the Obstetric Section, he delivered an eloquent address, which our readers had an opportunity of perusing in the columns of this journal. By Dr. McClintock's death a vacancy occurs in the General Medical Council, he having been appointed by the Crown a few months since.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Oct. 20th:—

Cheyne, Robert, Nottingham-place.
Coles, William James, George-street, Croydon.
Marshall, John Grissell, Wallingford, Berks.
Neligan, James Charles, Bellina, Co. Mayo, Ireland.

The following gentlemen also on the same day passed the Primary Professional Examination:—

John Henry Greenway, Guy's Hospital; Thomas Davies Pryce and Ettore Sarzana, St. Bartholomew's Hospital.

THE cattle on two hundred and six farms in Lancashire are said to be affected with the foot-and-mouth disease or pleuro-pneumonia.

THE foundation-stone of a large infirmary, to accommodate 400 patients, was laid at Fulham on Wednesday by Mr. Spofford, Chairman of the Croydon Board of Guardians. The cost of the building is estimated at £100,000.

ADMIRALTY.—The following appointments have been made:—Surgeon George Smith to H.M.S. *Penelope*; Staff-Surgeon Henry Beaumont and Surgeon Malcolm V. Stace to the *Diamond*; Surgeon Penrose J. Bascroft to the *Chatham* Division of Royal Marines, vice J. W. Davis to the *Bittern*.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the Council held on the 20th inst., the following were elected Examiners in Dental Surgery for the ensuing year:—John Henry Longford, Edward S. O'Grady, B. W. Richardson, Edward A. Stoker, Henry Gregg Sherlock, Frederick Taylor.

AT the last meeting of the City Commissioners of Sewers a recommendation was received from the Finance Committee that, in consequence of the extra duties involved in the carrying out of the provisions of the Artisans and Labourers' Dwellings Act, a sum of £250 be awarded to the medical officer of health.

KING'S COLLEGE.—Mr. Ernest Paul Alphonse Mariette and Mr. Richard John Stephens have obtained the Warneford Entrance Scholarships of £75 each for previous education in general literature and science; Mr. Philip Hensley the Sambrooke Entrance Exhibition of £60; and Mr. Evan Lewis Hickey that of £40 for proficiency in literature and science.

PRESENTATIONS.—The patients and servants at the Mineral Water Hospital, Bath, have presented Dr. A. Coppinger, the resident physician, with a timepiece and an address, the occasion being his retirement from the institution. ——Dr. G. C. Julius, of Seale, has been presented with a handsome silver snuff-box by the inhabitants of the village, as a mark of esteem on the occasion of the Doctor leaving for the west of England.

UNIVERSITY OF CAMBRIDGE.—The examinations for the degrees of M.B. and M.C. for Michaelmas term, 1881, will begin on Tuesday, Dec. 13th. Candidates for the degree of M.B. are requested to send their names to the Prælectors of their several Colleges on or before Saturday, Nov. 26th. The certificates of candidates for the degree of M.B. are to be sent to the Secretary, and the names and certificates of candidates for the degree of M.C. to the Regius Professor of Physic, Dr. Paget, Cambridge, on or before December 3rd.

OWENS COLLEGE.—Mr. H. Marshall Ward, B.A., has been elected to the new Fellowship, value £100, in the department of Biology.

BEQUESTS AND DONATIONS TO MEDICAL CHARITIES. Mr. Henry Dodd, late of the City Wharf, bequeathed £150 each to the London Hospital and the City of London Truss Society. Mrs. Eliza Fall bequeathed £200 to the National Hospital for the Paralysed and Epileptic. Mr. Philip Hewitt, of Boulogne-sur-Mer, has given £1050 in aid of the funds of the Bridgwater Infirmary. Mr. W. E. Readle, late of Westminster Chambers, bequeathed £100 each to the Devon and Cornwall Hospital and to the Hospital for Incurables, Putney. The German Hospital, Dalston, becomes entitled to £1000 under the will of the late Mr. William Müller. Mrs. Catherine Amelia Cox, late of Gordon-square, bequeathed £50 to the St. Pancras General Dispensary. By the will of Mr. Edward Medley, of York, the York County and the Surrey County Hospitals each receive £500.

BOOKS ETC. RECEIVED.

BAILLIÈRE, J. B., ET FILS, Paris.
Etudes de Thérapeutique, Générale et Spéciale. Par le Dr. A. Luton. pp. 472.

BLACKIE & SON, London.
Elementary Treatise on Natural Philosophy. By Privat Deschanel. Translated and Edited, with extensive Modifications, by J. D. Everett, M.A., D.C.L., &c. Sixth Edition. pp. 1156. Illustrated by 783 Wood Engravings and 3 Coloured Plates.

BLACKWOOD & SONS, Edinburgh & London.
Koumiss, or Fermented Mare's Milk. By G. L. Carrick, M.D. &c. pp. 294. With Appendix.

BLAKISTON, P., Philadelphia.
Text-book of Modern Midwifery. By Rodney Glisan, M.D. pp. 639. With 130 Illustrations.

CHAPMAN & HALL, London.
The Analysis and Adulteration of Food. By James Bell. Part I.: Tea, Coffee, Sugar, Cocoa. pp. 130. Illustrated.

CHURCHILL, J. & A., London.
A Practical Manual of the Diseases of Children, with a Formulary. By Edward Ellis, M.D. Fourth Edition, Revised and Enlarged. pp. 522.

HOUGHTON, MIFFLIN, & Co., Boston, U.S.A.
Transactions of the American Gynecological Society. Vol. V. pp. 470. With Illustrations.

JOHNSTON, W. & A. J., Edinburgh and London.
Zoological Atlas, with Practical Directions and Explanatory Text, for the Use of Students. By D. M'Alpine, F.C.S. Invertebrata. 240 Coloured Figures and Diagrams.

KIMPTON, H., London.
Medical Electricity. By Roberts Bartholow, A.M., M.D., &c. pp. 262. With 96 Illustrations.
A Practical Treatise on Impotence, Sterility, and Allied Disorders of the Male Sexual Organs. By Samuel Gross, A.M., M.D. pp. 174. With 16 Illustrations.

LEWIS, H. K., London.
What to do in Cases of Poisoning. By William Murrell, M.D., M.R.C.P. pp. 96.
On the Physical Examination of the Mouth and Throat, with an Appendix of Cases. By G. V. Poore, M.D., F.R.C.P. pp. 73.

LIVINGSTONE, E. & S., Edinburgh.
The Student's Handbook of Chemistry, with Tables and Chemical Calculations. By H. L. Greville, F.I.C., F.C.S. pp. 504.

LONGMANS, GREEN, & Co., London.
Inorganic Chemistry, Theoretical and Practical; an Elementary Text-book. By William Jago, F.C.S. &c. pp. 202. Illustrated.

LOW (SAMPSON), MARSTON, & Co., London.
Lectures on the Diagnosis and Treatment of Diseases of the Chest, Throat, and Nasal Cavities. By G. F. Ingals, A.M., M.D. pp. 427. With 135 Illustrations.
A Manual of Histology. Edited and Prepared by T. E. Satterthwaite, M.D., of New York. pp. 478. With 198 Illustrations.

MASSON, G., Paris.
La Circulation du Sang à l'Etat Physiologique et dans les Maladies. Par Prof. E. J. Marey. pp. 744. Avec 358 Figures dans le Texte.

MURRAY, J., London.
The Formation of Vegetable Mould through the Action of Worms, with Observations on their Habits. By Charles Darwin, LL.D., F.R.S. pp. 326.

PAUL (KEGAN) & Co., London.
Dramatic Singing Physiologically Estimated. By Walter Hayle Walshe, M.D. pp. 123.
The Perfect Way in Diet: a Treatise advocating a Return to the Natural and Ancient Food of our Race. By Anna Kingsford, M.D. pp. 121.

SIMPKIN, MARSHALL, & Co., London.

Davos Platz as an Alpine Winter Station for Consumptive Patients. By J. E. Muddock. pp. 100.

SMITH, ELDER, & Co., London.

Syphilis and Local Contagious Disorders. By Berkeley Hill, M.B.Lond., F.R.C.S. Second Edition, entirely Rewritten by Berkeley Hill and Arthur Cooper. pp. 636.

Female Diseases, the Result of Errors in Habit and Hygiene during Childhood and Puberty; by Dr. R. J. Nunn.—Journal of Mental Science, October.—Diphtheria and Bacteria, Pus-corpuscles, Leucocytes, Leukæmia, and Pyæmia; by Dr. Rollin R. Gregg, Buffalo.—Traitement Dosimétrique de la Diphthérie par le Sulfure de Calcium; par le Dr. P. A. Fontaine.—Reports of Medical and Surgical Cases at University College Hospital, 1880.—Chemical Notes and Equations; Second Edition; by R. Milne Murray, M.A., M.B.Ed. (Maclachlan & Stewart.)—Vierteljahresschrift für Dermatologie und Syphilis, VIII. Jahr.—Du Diagnostic des Maladies de la Moëlle Epinière; par Dr. W. R. Gowers; traduit de l'Anglais par le Dr. Oscar Jennings.—Ueber Sprechanomalien im Kindesalter; von Dr. R. Coën.—Fourteenth Annual Report of the State Board of Charity. (New York.)—Hints for Householders, Parents, and Others; by B. B.—Health Lectures for the People, delivered in Manchester, 1880-81.—Assainissement de Paris.—Hardwicke's Science Gossip.—Hunter and the Stag: a Reply to Prof. Owen from a Scientific Point of View.—The 113th Annual Report of the Leeds General Infirmary.—Cases Illustrative of the Influence of Nitro-Glycerine in Angina Pectoris, and of Casca in Dilatation of the Heart.—Cases in Clinical Medicine; by Dr. M'Call Anderson.—Resena del Primer Ejercicio del Instituto de Terapéutica operatoria del Hospital de la Princesa; por el Dr. F. Rubio y Gali.—Mittheilungen ü. Fragen der Wissenschaftlichen Medicin; von Wilhelm Koch in Dorpat. (Fischer, Kassel).—Statitischer Sanitats-Bericht ü. die Königlich Preussische Armee und das XIII. Armeekorps.—Jail Hygiene in India; by T. Hume, M.B.Ed. (Thacker and Co., Calcutta.)—Four Cases of Hepatotomy; by Lawson Tait, F.R.C.S.—A Report on the Fevers of Cyprus, Malta, and Gibraltar; by Henry Veale, M.D.—The Birmingham Medical Review, October.—Quarterly Journal of Microscopical Science, October.—Westminster Review, October.—Complaints by Insane Patients; by Dr. J. A. Campbell.—An Analysis of the Involuntary Motions of the Hand, with some Account of the Use of the Kyrograph; by Percy R. Wilde, M.B.—Report on Opium, issued by the Imperial Maritime Customs Department.—Index Medicus. No. 9.—Transactions of the American Otological Society.—Archives of Medicine, October.—Virchow's Archiv.—Anales del Circulo Medico Argentino.—Revue des Sciences Médicales, Octobre.—Journal of Anatomy and Physiology, October.—Die Hauptstadt Budapest im Jahre 1881; von J. Körösi.—A Contribution to the History of Hygrometers; by G. J. Symons, F.R.S.—Scheme for a Central Fish Market for London; by Messrs. Cayley, Boyes, and Bridgman.—Thirteen at Dinner, and what came of it.—Gambier Chimes.—Brain, Part XV.—The Use of the Ambulance in Civil Practice; by Reginald Harrison, F.R.C.S.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning, at the latest.*

ALEXANDER, JAMES A., L.F.P.S.Glas., has been appointed Medical Officer for Knocknadona Dispensary District of the Lisburn Union.

BIGGS, J. STRANGE, M.D. St. And., M.R.C.P.Lond., has been re-appointed Visiting Physician to the Surrey Private Lunatic Asylum.

BOOBBYER, PHILIP, M.R.C.S., has been appointed Assistant House-Accoucheur to King's College Hospital.

CHITTY, A. GOLDNEY, M.R.C.S., has been appointed Medical Officer for the Berry Pomeroy District of the Totnes Union.

CHRISTIE, J. W. STIRLING, L.R.C.P. &c., has been appointed Assistant Medical Officer to the County Asylum, Stafford, vice W. M. Turner, resigned.

CROOKSHANK, EDGAR M., M.R.C.S., has been appointed Assistant House-Surgeon to King's College Hospital.

GEORGE, J. WINNALL, M.R.C.S., has been appointed Medical Officer for the Fifth District of the Upton-upon-Severn Union.

GROVER, J. POLLINGTON, M.R.C.P.Ed., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Second Division of the Third District of the Newhaven Union.

HARVEY, W., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Teignmouth District of the Newton Abbott Union.

HILL, J. HIGHAM, M.D., F.R.C.S.Ed., has been appointed by the Government of New South Wales a Special Medical Inspector in connexion with the present Epidemic of Small-pox in Sydney.

HODGES, JAMES, L.S.A.Lond., has been appointed House-Accoucheur to King's College Hospital.

HOLTHOUSE, EDWIN H., B.A., M.R.C.S., has been appointed House-Surgeon to King's College Hospital.

JENKINS, T. GRIFFITH, L.R.C.P.Ed., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Workhouse of the Ruthin Union.

JOHNSTON, R. M'KENZIE, M.B., C.M., L.R.C.S.Ed., has been appointed Resident Physician to the Royal Hospital for Sick Children, Edinburgh, vice Hodsden, whose term of office has expired.

LITTLE, HENRY S., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer of the St. Giles's District, Reading Union, vice Lowsley, resigned.

MADDISON, W. T., M.R.C.S., has been appointed House-Physician to King's College Hospital.

RABBETH, SAMUEL, L.S.A.Lond., has been appointed Assistant House-Physician to King's College Hospital.

RABY, JOHN, L.R.C.P.Ed., L.R.C.S.Ed., M.R.C.S., has been appointed Medical Officer for the Totnes District of the Totnes Union.

SNOWDEN, A., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Hutton District of the Stokesley Union.

TURNBULL, A. R., M.B., C.M., Senior Assistant-Physician, Royal Edinburgh Asylum, has been appointed Medical Superintendent of the Fife and Kinross District Lunatic Asylum.

WEST, JOHN A., M.R.C.S., has been appointed House-Surgeon to King's College Hospital.

WILLIAMS, T. HAMMOND, L.R.C.P.Ed., L.F.P.S.Glas., has been appointed Senior Medical Assistant to the Glasgow Town Hospital and Asylum, vice Dr. John Baird, resigned.

Births, Marriages, and Deaths.

BIRTHS.

CASSAN.—On the 25th inst., at Gainsborough, the wife of Theodore Cassan, M.R.C.S., L.R.C.P., of a daughter.

CRICHTON.—On the 22nd inst., at Cambridge Villas, Twickenham, the wife of George C. Crichton, M.B., L.R.C.S.Ed., of a son.

DAVIDSON.—On the 14th inst., at Coventry, the wife of Charles Davidson, M.D., of a daughter.

DUKE.—On the 24th inst., at Rugby, the wife of Thomas Duke, M.A., M.R.C.S., of a daughter.

GROSE.—On the 15th inst., at Melksham, Wilts, the wife of S. Grose M.D., F.R.C.S. (Exam.), Staff-Surgeon R.N. (retired), of a son.

MANDERS.—On the 17th inst., at Agincourt House, Yorktown, Surrey, the wife of Horace Manders, F.R.C.S., of a son.

PHILPOTS.—On the 16th inst., at "Disco," Bournemouth, the wife of E. P. Philpots, M.D., of a daughter.

SCOTT.—On the 25th inst., at Shirley Lodge, Shirley, Hants, the wife of R. R. Scott, Surgeon-Major, Army Medical Department, of a daughter.

SEXTON.—On the 22nd inst., at Almorah-crescent, St. Helier's, Jersey, the wife of Edward James Sexton, M.D., Bombay Medical Establishment, of a daughter, stillborn.

MARRIAGES.

CONNOLLY—POTTS.—On the 19th inst., at St. Mary's Church, Athlone, Benjamin Bloomfield Connolly, M.R.C.S., Army Medical Department, to Olivia Frances, second daughter of William Potts, Esq., J.P., of New Court, Athlone.

MASTERS—SIMPSON.—On the 19th inst., at Birmingham, John Alfred Masters, L.R.C.P.Lond., M.R.C.S.Eng., of Stafford House, Hednesford, Staffs, to Catherine, eldest daughter of F. R. Simpson, Esq., of Clarendon-road, Edgbaston.

PRITCHARD—GELL.—On the 22nd inst., at the Parish Church, Finchley, by the Rev. A. R. Carter, M.A., Rector of Wapping, S. E. Pritchard, M.R.C.S.E., L.S.A.Lond., to Thomasina Ann Isabella, daughter of A. S. Gell, Esq., M.R.C.S.E., of Southam, Warwickshire, and niece of the late Captain T. B. Bell, Elder Brother, Trinity House, Newcastle-upon-Tyne.

TAYLOR—STRACHAN.—On the 14th ult., at St. Paul's, Chapelton, Jamaica, West Indies, by the Rev. H. Wade Whitfield, Blanche, only daughter of the late Colonel Strachan, 1st W. I. Regiment, to Wm. Taylor, M.B., C.M.Glas., Government Medical Officer, District of Upper Clarendon.

DEATHS.

BROSTER.—On the 20th inst., at the Naval Hospital, Haslar, Edward Brereton Broster, Fleet Surgeon, Royal Navy.

DAVIDSON.—On the 23rd inst., at Coventry, Ellen Deane, wife of Charles Davidson, M.D., in her 50th year.

GARNEYS.—On the 21st inst., at Repton, William Garneys, Esq., Surgeon, aged 49.

GREENHOW.—On the 25th inst., at Newton Hall, Potternewton, Leeds, T. M. Greenhow, M.D., F.R.C.S., in his 90th year.

HARMER.—On the 19th inst., William Harmer, for more than forty years Proprietor and Resident Superintendent of the North Grove House Asylum at Hawkhurst, in his 74th year. Friends will kindly accept this intimation.

MCCLINTOCK.—On the 21st inst., Alfred H. McClintock, M.D., LL.D., F.R.C.S.I., aged 60.

MAWHINNY.—On the 20th inst., suddenly, at Rathgar-road, Dublin, Thomas Mawhinny, L.K.Q.C.P.I., M.R.C.S.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Oct. 27th, 1881.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radia in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Oct. 21	29·64	E.	46	45	..	49	42	·24	Overcast
,, 22	29·51	E.	49	47	..	52	48	..	Overcast
,, 23	29·40	S.E.	50	49	..	52	48	1·18	Raining
,, 24	29·64	E.	49	48	..	50	46	..	Overcast
,, 25	29·82	N.E.	44	41	..	52	39	..	Fine
,, 26	30·05	E.	45	43	..	50	39	..	Fine
,, 27	30·22	E.	45	40	..	48	38	..	Hazy

Medical Diary for the ensuing Week.

Monday, Oct. 31.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. The President (Dr. Broadbent) will exhibit a Case of Paralysis of the Seventh, Eighth, and Ninth Nerves, with Atrophy of the Muscles affected.—Dr. Churton (Leeds) will give the details of Two Cases of Aneurism of the Left Ventricle; Notes of a Case of Primary Dilatation of Tricuspid Orifice; also a Case of Shedding of the Epidermis of the Sole of the Foot following a Quinine Roseola occurring three times.

Tuesday, Nov. 1.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. The following specimens will be shown:—Ear of Corn discharged through the Chest; Drawing of Muscæ Volitantes; Lupus Lymphaticus; Striped Muscle Tumours connected with the Kidney; Longitudinal Fracture of Shaft of Femur; Tumour of Kidney chiefly composed of Muscular Fibre; Necrosis of Skullcap after a Burn; Absence of One-half of Cerebellum; Abscess in Head of Tibia; Malignant Disease of Kidney following Renal Calculus; Remarkable Thickening of Pericardium; Extra-uterine Fœtation.

Wednesday, Nov. 2.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1 P.M.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department.—1.45 P.M., and on Saturday at 9.15 A.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Dr. J. Matthews Duncan, "On Shortness of the Cord as a Cause of Obstruction to the Natural Progress of Labour."—Mr. N. W. Jastreban (St. Petersburg), "On the Normal and Pathological Anatomy of the Ganglion Cervicale Uteri."

Thursday, Nov. 3.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.
HARVEIAN SOCIETY.—8½ P.M. Mr. Edmund Owen, "On the Treatment of Joint Affections in Childhood."
ABERNETHIAN SOCIETY (St. Bartholomew's Hospital).—Mr. Macready will introduce a discussion on "The Arrest of Arterial Hæmorrhage."

Friday, Nov. 4.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Nov. 5.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

Local papers containing reports or news-paragraphs should be marked.

We cannot prescribe, or recommend practitioners.

Lectures, original articles, and reports should be written on one side only of the paper.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

THE USE AND ABUSE OF ALCOHOL.

THE question of the use of alcohol in health and in disease occupied the attention of the Sanitary Congress which lately met at Vienna, formed by the joint assembly of the two German societies which deal respectively with the theoretical and practical aspects of hygienic questions. The principal paper read was that of Professor Binz, from Bonn, an authority of importance on the subject. He asserted that there are numerous cases of feverish and non-feverish disorders in which the use of alcohol is able to preserve the activity of the heart and the organs of breathing, and to bring the entire organism, even if with difficulty, through a dangerous crisis. This he attributed to the nutritious power of alcohol, which, as it were, supplies the fuel to the human machine, which under normal circumstances is furnished by the fatty tissues, &c. He also referred to its successful use when the stomach cannot retain any other form of nourishment, and as a means of reducing the temperature in cases of fever, thus indirectly benefiting the patient by checking the loss of strength. While condemning in a general way the use of alcohol when not for medicinal purposes, the speaker cited numerous cases in which alcohol is rightly used as a preventive of illness. He referred to the use of it in cases of extreme cold, and also as a means of preventing the relaxation of the heart's action, which work in excessive heat has been known to produce. As to the efforts sometimes made to counteract the consumption of spirits by that of beer, the statistics and calculations quoted by the learned professor pointed to the fact that an habitual beer drinker often takes as much alcohol as a regular consumer of spirits. As to the excess to which beer drinking can be carried, he quoted the following statistics:—In a German capital the average consumption of beer in 1876 per head of the population (including women and children of all ages) was equal to about 400 quarts, or rather more than a quart a day. In this daily quantity there would be about fifty-two cubic centimetres of alcohol, and the individual consumption of the beer-drinking male population is estimated at from two to ten times this average rate. As to the relative demerits of excessive drinking in these two forms, Professor Binz remarked that the beer drinker usually took his liquor slowly in an atmosphere more or less insalubrious. At the same time he admitted that the question of encouraging the brewing industry with State assistance, as a means of combating spirit drinking, was deserving of full consideration, even if it only substituted for one enemy another of a less dangerous character. He also pointed out the necessity of the Government taking up the question of the adulteration of spirits. The paper prepared by Dr. Baer was very lengthy, and as time was limited he could only read some passages from it, which, however, were fully appreciated, and will cause the publication of his treatise to be looked for with interest. His remarks dealt with the necessity of asylums for inebriates being more extensively erected, and with the advisability of persons convicted of drunkenness being placed in such institutions instead of being imprisoned as for an ordinary misdemeanour. The question is likely to come before the German Legislature at no distant date, and the proposal of Dr. Baer is said to have the support of Dr. Virchow and other eminent physicians.

M.D., F.R.C.S. Lond., L.A.S.—An examination will have to be passed, the particulars of which will be best ascertained by an application to the French authorities. A very good statement will be found in Hardwicke's "Medical Education and Practice" (Churchill).

Dr. S. Macaulay's paper will appear in an early number.

RULES OF SMALL HOSPITALS.

M.D. would be obliged if any of our subscribers would send him a copy of the rules of provincial hospitals containing less than twenty beds.

Parens.—The matter shall be borne in mind.

Omega has not enclosed his card.

B.—Yes; Mr. Croft, the recently elected member of the Court of Examiners, will take his seat at the next meeting of the court in the ensuing month. The metropolitan hospitals are now represented on the Court by Messrs. Holden and Savory (St. Bartholomew's), Birkett and Forster (Guy's), Holmes (St. George's), Wood (King's College), Hulke (Middlesex), and Hutchinson (London). The Examiners in Medicine are Drs. Bristowe, Dickinson, Gee, and Roberts; the Examiners in Midwifery are Drs. J. Williams and G. E. Herman.

MR. J. C. ORCHARD'S REFORMS IN MEDICAL EDUCATION.

To the Editor of THE LANCET.

SIR,—In THE LANCET of the 1st inst. there is a letter on the above subject, which I cannot allow to pass unnoticed. It is from Bengal, and is signed "E. S. B."

"E. S. B." ought not to consider that he was a student of average ability. Considering the eminent position he attained, he is a man of more than average ability, and it is unfair to those not so gifted and so fortunate to expect that they can be made to equal or even to approach to himself. Notwithstanding his modest estimate of his own abilities and capacity, I remark, from an extensive and intimate acquaintance with the medical students of Edinburgh, that he underrates his own abilities and powers, and overrates those of others. Very few students at seventeen years of age would in these days pass every subject of the preliminary examination, and gain honours in French and natural philosophy. I should have liked that "E. S. B." had informed you in what year he commenced his medical studies. In his letter he speaks of "five" subjects of the preliminary. There are now six. Twenty years ago it was comparatively easy to obtain a diploma or a degree. It is since then that the great burdens I complained of have been thrown upon the students. Even last year another subject was added by the General Medical Council. I do not know if "E. S. B." is aware that the subject of medical education has for the last few years engaged very much the attention of thoughtful men, and there is little wonder, seeing that the percentage of rejected candidates has risen so very high. To show the general interest taken in the subject, I may remark that the British Medical Association a few months ago issued a circular to all the registered practitioners in the kingdom inviting them to offer suggestions on the subject of medical education and medical reform. "E. S. B." has altogether mistaken the scope and bearing of my remarks on medical education. I did not propose to curtail the subjects of study, but to curtail the examinations. I proposed that the examinations should be entirely confined to practical subjects, and that matters which may be called ornamental—such as chemistry, botany, and natural history—should still be studied. "E. S. B." tries to make a point when he says that every medical practitioner should be able to analyse "drinking water," "food and drinks," and "toxicological" products. Does he not know that, in spite of chemical education, not one in a thousand undertakes to do these things? These matters are done by experts. He also in certain diseases of the eye talks of the doctor supplying his patients with "suitable glasses." Notwithstanding what he says, I do not believe that medical gentlemen have yet become retailers of "glasses." I always thought that when glasses are required the patient goes to an optician and fits himself with suitable ones. It is a mistake in "E. S. B." to say that I wished that medical students should be "shorn" of chemistry, botany, zoology, &c. The shearing exists only in his own imagination. I repeat that while I would wish a stringent examination in all practical matters, there should be no examination in the above ornamental subjects, but that still they should be studied. I need not go over the arguments I used when discussing the subject of medical education in my article published in THE LANCET in July last. I have not seen these arguments refuted, or attempted to be refuted. They are self-evident, and till "E. S. B." produces better than sneers about "text-books," "insignificant tests in practical subjects," "pedagogue," "pons asinorum," "the square of $a + b$," he had better leave medical education alone.

Having now answered "E. S. B.'s" letter, I will in a few words state that, reflecting on the subject, I am more convinced than ever that there are only the two following alternative methods by which medical education can be treated:—1st, that if the present system is to be continued, the time of study must be lengthened to seven or eight years; or, 2nd, that the examinations should be confined to strictly practical matters, and that evidence should be given that the ornamental subjects have also been studied. If the first alternative be adopted, the half of the ornamental subjects should be passed at the end of the second year; the other half at the end of the fourth year; anatomy and physiology at the end of the sixth year; and the strictly practical subjects—surgery, medicine, and midwifery—at the end of the seventh or eighth year. Between the examinations time would thus be obtained to allow the subjects already passed to fade more or less from the memory, the salient points being only or chiefly retained, and thus make room, so to speak, for the succeeding subjects, the study of the practical subjects, of course, going on during all or most of the time. But by far the better alternative, as I have formerly endeavoured to show, would be to confine the subjects of examination entirely to practical matters, and to require only, without examination, evidence that the ornamental subjects have been studied.

I am, Sir, your obedient servant,

Kingussie, Oct. 1881. J. C. ORCHARD.

FOREIGN BODY IN THE NOSTRIL.

To the Editor of THE LANCET.

SIR,—Should you deem the following worthy of insertion, kindly give it publication as a possible hint in like cases.

A few weeks since a child was brought to my surgery with a grain of Indian maize lodged in the nostril, to the manifest concern of the mother and inconvenience to the patient. The substance was so firmly wedged in the nostril that the ordinary methods used in such cases were quite useless. Happening to have a snuffbox in the room, the idea struck me of administering a pinch, and the second application caused such a *vis a tergo* in the shape of a sneeze that I had the satisfaction of seeing the corn forcibly expelled on the carpet.

I am, Sir, yours very truly,

Oaklands, Sheepwash, North Devon, JOHN DAY JONES.
Oct. 25th, 1881.

MR. BURDETT ON HOSPITALS.

To the Editor of THE LANCET.

SIR,—In his interesting communication on the distribution of hospitals in the metropolis, published in your issue of Oct. 8th, Mr. Burdett makes one omission, which I trust you will allow me to supply. This is, that the north of London, with one million of inhabitants, contains but one hospital—viz., the Great Northern, with thirty-three beds. Until lately this was correct, but about three years ago the institution known as the North-West London Hospital was started to meet the pressing wants of the not very wealthy and crowded districts of Hampstead, Highgate, and Camden and Kentish towns. This hospital contains twenty-six beds, which are constantly full, and the out-patients number daily about eighty, from each of whom, unless when recommended by a subscriber's letter, or when urgency or extreme poverty presses, a small payment is demanded. This plan preserves the independence of the sick, and helps the funds of the hospital. The medical men here, as elsewhere, give their time gratis.

I remain, Sir, your obedient servant,

D. H. CULLIMORE,
Connaught-square, Oct. 26th, 1881. Physician to the Hospital.

Mr. G. F. Bodington.—We are afraid remonstrance would be thrown away in the matter.

Mr. John James.—We do not insert articles that have already been published.

SWALLOWING A PEACH STONE.

To the Editor of THE LANCET.

SIR,—Seeing Dr. Cox's account of a child's recovery after swallowing a marble, I feel inclined to send you an account of a similar case, where a little boy aged three years and a half swallowed a peach stone. I may mention that the treatment was suggested by having, a short time before being called to the case, read Dr. Cox's case in THE LANCET. I ordered dry solid food for the first twenty-four hours, and slightly modified the treatment for the next twenty-four hours by allowing the smallest quantity of water to drink, and also gave a grain of Dover's powder twice a day. At the end of forty-eight hours I gave the following powder:—Powdered rhubarb and carbonate of soda, six grains of each; jalap resin, one grain. Three hours afterwards the peach stone was passed, so covered with fæces and mucus that it was not visible till the evacuation was carefully examined. This contrasts most favourably with a case of which I heard from some friends of mine, and which happened in another Indian station. A child aged five swallowed a peach stone, and purgatives were immediately given. The stone was not passed, and the accident was forgotten till, after three months, the child died with dysenteric symptoms, which were proved by a post-mortem examination to be due to the stone, which was found in the intestinal canal.

I am, Sir, yours, &c.,

Kashmir, Sept. 5th, 1881. E. DOWNES, L.R.C.P. Lond.

CHEMISTS' ASSISTANTS.

To the Editor of THE LANCET.

SIR,—An anonymous donation having reached this Association from "Chemists' Assistants," together with a letter detailing their grievances, I beg the favour of stating, through your columns, that those grievances have never been overlooked by our board of management. Some years ago the Society conducted a special campaign in their behalf, and published a pamphlet showing the hard treatment endured by many of them. Various improvements followed. Four years ago the Society again took up their case, and after canvassing a large number of firms, convened meetings at the West-end and at the Pharmaceutical Institute. From those meetings a "Chemists' Early Closing Association" was formed, and effected many improvements. The Society is aware that large numbers of chemists' assistants are still greatly overworked, that they are occupied in business from an early hour in the morning till a late hour at night, and that, in addition, they perform Sunday duty, and are liable to be called out of bed to supply the wants of their customers. Although the Society is at present overwhelmed with other work, owing to its inadequate resources, it hopes yet to effect great improvements in behalf of the much enduring chemists' assistants.

I am, Sir, yours faithfully,

J. A. STACEY, Secretary.

Early Closing Association, 100, Fleet-street, E.C.,
October 11th, 1881.

COLLEGIAL PRIZES.

A Member of the College.—The essays for the Jacksonian Prize for the present year must be delivered at the College of Surgeons not later than 4 o'clock on Saturday, the 31st of December next. The subject is the "Pathology and Surgical Treatment of Diseases of the Hip-joint." For the following year, 1882, the subject is "Wounds and other Injuries of the Nerves, their Symptoms, Pathology, and Treatment." In this year also the triennial prize essays will be due, "On the Relations between the Radicles of the Lymphatic System and Capillary Vessels."

HYDROPHOBIA.

To the Editor of THE LANCET.

SIR,—Mr. Jennings, in his paper in THE LANCET of the 8th inst., says: "I believe no authentic case of recovery has been recorded." If he turns to THE LANCET, vol. ii., 1876, page 84, he will find a note referring to such a case treated by curara.

I am, Sir, yours, &c.,

Halswell House, Cardiff, Oct. 17th, 1881. ALF. SHEEN, M.D.

A HOMŒOPATHIC LECTURE.

To the Editor of THE LANCET.

SIR,—In the course of September of this year I received for the second or third time a card inviting me to attend the introductory lecture at the Homœopathic Hospital. As there was no introductory lecture at my own school I went, and I think that a short report may not be uninteresting to many of my fellow-practitioners, who, like myself, are totally unacquainted with the tenets of this faith.

The lecturer, in reviewing the "Organon" of Hahnemann, began by stating that it ran through many editions, and that in the course of time it was much changed. The first edition only contained a number of homœopathic cures. A distinguished critic had lately disposed of the first and last cures as worthless. The lecturer would go further, and admit that six were worthless, fifteen dubious, but twenty-four were good. The second and third editions contained some theories as well, while in the fifth edition the cures disappeared altogether, and the whole book was an essay of medical philosophy. The theories of dynamisation of medicine and of infinitesimal doses were hardly proposed till the fourth edition, which first advocated the exhibition of medicines in their thirtieth dilution. A considerable number of years elapsed between these editions, during which the author retired from Leipzig to comparative retirement, and it was during the brooding of his retirement that the magnificent theories were evolved from the inner consciousness of his mind. These theories, enunciated in the shape of 294 aphorisms, were in the main correct, though some of them were not tenable, such as that intestinal worms were the product of disease. After this introduction the lecture consisted in the main of a justification of the theory of "similia similibus," in which the lecturer displayed a certain amount of ingenuity, which was certainly unexpected by me. He took for his text the third aphorism, which he said stated that "if a physician knew what was curable in disease, if, again, he discerned what was curative in medicines, and, thirdly, if he understood the obstacles that were in the way, he would be able to cure." This was the famous third aphorism.

Knowledge of disease consisted in knowledge of the symptoms. Symptoms and morbid appearances were the same. Homœopaths were accused of not studying morbid anatomy. If a man died, morbid anatomy revealed that disease had been so strong that nothing could cure it. A homœopath only concerned himself with what was curable in disease, and so incurable diseases were beyond his art. (It may strike you that I am mocking now, but such positively were his words.) For homœopathy was an art, not a science. It was not "Heilkunde," but "Heilkunst." What was the good of all this science if a young practitioner was not taught the art of applying his remedies; and what was the tendency of the present generation of physicians? To cram the youthful mind with science and leave out the knowledge of healing, as was instanced at the recent Medical Congress, where there was only one half-pennyworth of therapy amidst such gallons of scientific sack.

The second head of this discourse was that it was our duty to discern what was curative in medicine. This, he said, could only be done by observing the action of drugs on the healthy, and he claimed for Hahnemann that he had been the first to experiment with drugs, and had pointed out the value of quinine, bryony, aconite, arsenic, and apis; that in consequence of his discoveries physicians had relinquished bleeding and other heroic treatment, and had relapsed into "almost nihilism," but through him we had learned that corrosive sublimate cured diarrhœa, belladona sore-throats, and ipecacuanha vomiting, things which were now acknowledged by all therapeutists. Formerly physicians slew all around; some slew in their chariots, others slew on foot.

The third head of the discourse referred to the obstacles in the course of cure, and here the lecturer developed the theory of "similia similibus." Disease, we were informed, was "dynamic disturbance of vital force." It consisted in abnormal symptoms, while health was restored by a revolution in these symptoms. This was done by exhibiting drugs which in health would produce similar symptoms as the disease; but you must not use the remedies in their full strength, as then this disturbance of the vital force might be increased. It was necessary to give these drugs in diminished doses so as to excite the vital force strongly, and then a reaction to health would set in.

The lecturer here deeply regretted that time would not allow him to deal with dilutions and dynamisation by rubbing medicines, and wound up with a peroration, in which he stated that homœopathy, the medicine of the future, was now preached by ten thousand practitioners at twenty hospitals and dispensaries.

The lecture, taking place in the board-room of the hospital, was attended by about eighty gentlemen, and I noticed two ladies. I was glad to see that among the audience there were only very few who probably belonged to the true genus "medical student;" the bulk of the hearers were older men, who, if they went into error, would not probably be misled.

The impression of the proceedings on me was that there was a singular absence of "go" or enthusiasm in them. The faintness of the applause was of a piece with the triteness of the remarks of the lecturer. And the impression which I had was that homœopathy is a dead horse which no amount of flogging will bring to life again. Based upon the ponderings of a man who had retired into seclusion, founded on *à priori* arguments in no way dependent on the observation of nature, enunciated at a time when both natural science and medicine were in their infancy, it would indeed be a wonder if there was even one half-pennyworth of truth in such gallons of error.

It is indeed impossible to argue seriously with men who profess faith in such doctrine, and I should not have asked you to insert this into your columns only that the question arose in my mind how possibly can a physician consulting with a homœopath arrive at unanimity of opinion as to treatment, and how can he avoid the semblance of countenancing a theory which both he and his consultee must be aware is preposterous.

I am Sir, your obedient servant,

St. James's-road, S.E., Oct. 14th, 1881. J. D. L. TEMPLE, M.D.

Army Medical Progress.—We think it would not be to the advantage either of the service or of Sir W. Muir to publish our correspondent's suggestion.

Esprit de Corps, A.M.A.—We take a totally different view from our correspondent of the propriety of the appointment to which he refers. We are of opinion that the present arrangement is the best in the interests of the service. Our correspondent is mistaken in his account of the manner in which the appointment was originally made.

Spes must excuse us from publishing his lengthy letter.

Mr. Ashley Bird.—The announcement appeared in our issue of the 22nd inst.

"TRAUMATIC TETANUS."

To the Editor of THE LANCET.

SIR,—Having read in THE LANCET of the 15th inst. a case of chronic traumatic tetanus, which occurred at the Wolverhampton Hospital, I wish to record a somewhat similar case that happened in my practice on March 3rd.

J. L——, aged six, had his left hand lacerated in a chaff-cutting machine; the middle finger had to be amputated. The wounds healed quite satisfactorily with the exception that a small piece of bone exfoliated from the second metacarpal bone, which ultimately healed. But on March 17th tetanic symptoms set in; the patient could not open his mouth, which prevented him from swallowing either solid or liquid food; the masseter muscles were firmly contracted, and there was twitching of the muscles of the face, which caused a sardonic grin. The temperature at first was 102°, but soon fell, and the pulse was quick occasionally. There was opisthotonos. The intellectual faculties were not affected, although the convulsive movements were very severe at times, and seemed worse at night. The bowels were constipated.

The treatment adopted was to open the bowels with a brisk purgative of calomel and scammony, application of ice to the spine; and after the bowels were well moved, three grains of hydrate of chloral were given every hour until sleep was procured, then every four hours as long as rigidity of the muscles continued. The patient was kept up with beef-tea and mutton broth. The bowels were kept open with the purgative powder occasionally. In three days the spasms gradually disappeared, and the patient was quite well in a month.

I am, Sir, yours faithfully,

Barmouth, Oct. 19th, 1881. H. J. LLOYD, L.R.C.P., &c.

UNUSUAL SOURCE OF LEAD POISONING.

To the Editor of THE LANCET.

SIR,—In decanting a bottle of good port wine a few days ago I noticed a somewhat more tawny colour of the wine than its age would justify. The wine had no bad flavour, but on examining the bottle more carefully two large shots were detected in the bottom, and readily removed. Had there been any "crust" upon the bottle this might not have been so easily done. The wine contained an appreciable quantity of lead, but no arsenic. The shots no doubt got lodged in the bottle during the familiar process of washing out crusted wine bottles. Here we have another possible (and to me new) means of lead-poisoning.

In some experiments made thirty years ago I found that two dozen common shots placed in a quart bottle of spring water for a month, at ordinary temperature, only very slightly contaminated the water with lead, nor was there any reaction with the usual tests for arsenic. The shots, in spite of many industrious shakings up of the bottle, soon became encrusted with a deposit from the water, which was of medium hardness.

I am, Sir, yours very truly,

Shepton Mallet, Oct. 15th, 1881. F. PORTER SMITH, Medical Officer of Health.

LETTS'S NEW STYLOGRAPHIC PEN.

WE have received a specimen of the above, and can speak very favourably of its merits. The inconvenience and loss of time involved with the ordinary quill or steel nib in having to take a "dip" every few seconds are with this, as with other stylographs, obviated. Several advantages are, however, claimed for this instrument as compared with others of the same class. Of the reality of some of these items of superiority our experience does not enable us to speak. Certainly its cost is considerably less, whilst its use in our hands has been highly satisfactory. The point, which does not appear to clog, glides with a pleasant smoothness over the paper, and the mechanism for filling and other details is ingenious and complete. This stylographic pen—the Wilsonstylus—is undoubtedly an excellent writing implement.

M.D.—The fee payable on letters patent under the Great Seal of the United Kingdom for the honour or dignity of a baronet is £100.

CONSTIPATION IN INFANTS.

To the Editor of THE LANCET.

SIR,—I will be glad if any of your correspondents can give me a hint as to the treatment of habitual constipation in infants from a few weeks to nine months old. I have had several very intractable cases lately. The children are fed by bottle with milk-and-water or barley water, in some cases fresh milk, in others Swiss milk being used. The motions are hard and white, and often cannot be voided without the help of an enema. Purgatives act, but only for a time, leaving the little patients no better than before. The health of the children is good, and they are thriving. I am, Sir, yours truly,

Oct. 19th, 1881. SOUTH DEVON.

FEES TO PARISH DOCTORS.

To the Editor of THE LANCET.

SIR,—In reference to your leading article in THE LANCET of Oct. 15th, wherein you comment upon and also insert a letter addressed to the Editor of the *Morning Post* by "F. G." on the allegation that parish doctors perform needless operations for the sake of fees, I quite agree with you that this is a very serious charge, and a very great insult to the Poor-law medical service. If "F. G." would take the trouble to refer to the General Order of the Local Government Board, June 10th, 1875, respecting medical officers' fees for amputation, he will see it is provided "that except in cases of sudden accident immediately threatening life, no medical officer shall be entitled to receive such remuneration for any amputation, unless he shall obtain at his own cost the advice of some member of the College of Surgeons, England, or some fellow or licentiate of the College of Physicians of London, before performing such amputation, and unless he shall also produce to the guardians a certificate from such member of the College of Surgeons or such fellow or licentiate, stating that in his opinion it was right and proper that such amputation should be performed."

Would it not be well for all medical men who hold a Poor-law appointment to at once apply and advise their respective Boards of Guardians, if they have not already done so, to act as the Blandford Board of Guardians did some years ago—that is, calculate the amount paid for extras for amputations, &c., for the past seven years, then take the average for one year? By so doing "F. G." could not make such unkind insinuations and uncharitable remarks on the hardworked and underpaid Poor-law medical officers, who would not be overpaid if their present salaries were doubled and all medicines and dispensing found for them.—I am, Sir, yours faithfully,

EDWARD MONRO SPOONER, M.D.,
Medical Officer to the Blandford Workhouse and the No. 2 District.

Blandford, Dorset, Oct. 18th, 1881.

ERRATUM.—In the list published last week of gentlemen who had passed the First M.B. Durham, for "William Owen Trown," read William Owen Travis.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Professor Greenfield, Edinburgh; Dr. Stephen Mackenzie, London; Dr. Love, Mitcham; Mr. S. Murphy, London; Mr. C. Innes, London; Mr. Edis, London; Mr. N. Grattan, Cork; Dr. Hunter, Littleport; Mr. Wylde, London; Mr. Bodington, Kingswinford; Mr. W. J. Cant, Lincoln; Mr. G. Field, London; Mr. Lyons, London; Dr. Murrell, London; Mr. Lawrence Hamilton; Mr. Lewis Jones; Dr. Guye, Amsterdam; Dr. Bampton, Plymouth; Dr. Anningson, Cambridge; Dr. Decroix, Paris; Mr. Carter, London; Mr. S. Weil; Dr. Taylor; Mr. Sim; Dr. Dukes, Rugby; Mr. Orchard, Kingussie; Dr. Irwin, Manchester; Mr. J. D. Jones, Oaklands; Mr. James, Gosport; Dr. Robinson, New York; Mr. Eales, Birmingham; Mr. Clubbe, Kidderminster; Dr. Edge, Manchester; Mr. Whitehead, Manchester; Dr. Galabin; Mr. Osborne; Mr. A. W. Blyth, London; Mr. Lloyd, Barmouth; Dr. B. Walker, Spondon; Mr. Waters; Dr. Neale, London; Dr. Charteris, Glasgow; Mr. Bird; Mr. G. W. Bloxam; Dr. Davidson, Liverpool; Mr. Kurtz, Wavertree; Mr. J. M. Wilson; Messrs. Wyleys and Co., Coventry; Mr. Lewis, Birmingham; Mr. Sanders, Wandsworth; Dr. Cauty, Aldershot; Mr. Armstrong, Nagpore; Messrs. Dawson Brothers, Montreal; Mr. Waddell, Punjup; Mr. Norman, Cheltenham; Messrs. Sampson Low and Co.; Mr. Karson, Kasaregod; Mr. Johnstone, London; Mrs. Winder; Mr. Baldwin, Leicester; Mr. Lawrence, Rugby; Mr. Buck, Settle; Dr. James Ross, Manchester; Dr. Thin, London; Mr. M'Gill, Leeds; Mr. Judge, London; Mr. White, London; Surgeon-Major O'Farrell, Limerick; Messrs. Armbrecht, Nelson, and Co.; Dr. Ryan; Dr. Mackuna, London; Deputy Surgeon-General Woodward; Mr. Holman, London; Mr. C. J. Symonds, London; Messrs. Lewis and Son, London; Mr. Cullimore, London; Dr. M'Neile, Tiverton; Esprit de Corps, A.M.D.; Alpha; Parens; Leuck, Aberdeen; M.D., F.R.C.S.L.; Enquirens; Army Medical Progress; A Country Practitioner; Spes; G. F.; &c., &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Newton Mudge, New South Wales; Dr. Davies, Ebbw Vale; Mr. Jackson, Ulverston; Messrs. Mottershead, Manchester; Dr. Masters, Hednesford; Mr Hathington, Gloucester; Dr. Marriner, New Zealand; Mr. Jones, West Bromwich; Dr. Collingridge, London; Mr. Davis, Blairgowrie; Mr. Richardson, Rhayader; Sir Henry Thompson; Miss Herbert, Bolton; Mr. Sommers, Strathinigio; Dr. Waters, Liverpool; Messrs. Berdoe and Co.; Mr. Vane, Glasgow; Mr. Roberts, London; Dr. White, Norwich; Mr. Nisbett, Edinburgh; Mr. Neate, London; Mr. Brown, London; Mr. M'Cormac, London; Mr. Smith, Bridlington; Mr. Burbidge, Coventry; Messrs. Watkinson and Crust, Spalding; Messrs. Drake, Stratford; Mr. Allsop; Mr. Norman, Cheltenham; A. B. M., Bedford; Ecraseur; J. H. A.; B. C., Bury; H. Y.; F. C. B., Bridlington; Devonshire; Medicus, Edinburgh; R. L.; X. Y. Z., Leamington; M.D.; Whiting; S. A. R.; G. S. B. B., Edinburgh; Vera; P. B. A., Risca; C. R. C.; Medicus, Bolton; Medicus, Leeds; M.D., Manchester; L.R.C.P.; Medicus, Axminster; M.B., Bland ord; Z. Z.; The Secretary, University, Aberdeen; M.A., Bacup; Medicus; Tenax, Wallingford; R. C., Greenwich; B. F. W., Clapton; M.R.C.S., Islington; M.D., Tunbridge Wells; A. B., Liverpool; Vega; &c., &c.

Edinburgh Courant, Leeds Mercury, Reading Mercury, Down Independent, Portsmouth Times and Naval Gazette, Christian Commonwealth, Bath Argus, &c., have been received.

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Agent for the Advertising Department in France—J. ASTIER, 97, Rue Caumartin, Paris.

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